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Standard Terminology Relating to Textiles[1]

This standard is issued under the fixed designation D 123; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ε[1] NOTE—This standard was updated editorially in July 2002.

1. Scope

1.1 This standard is the compilation of all terminology developed by Committee D-13 on Textiles.

1.1.1 This terminology, consists mostly of definitions, which are specific to the textile industry. Meanings of the same terms used outside the textile industry can be found in other compilations or in dictionaries of general usage.

1.1.2 The specific D13 subcommittee which has jurisdictional responsibility for every item is the first attribution noted after the definition. The standards in which the terms and definitions appear are listed by number after the jurisdiction for the term. The wording of an entry cannot be changed without the approval of the subcommittee which has jurisdiction and subcommittee D13.92 on Terminology. See 1.2, 1.3, 1.4.

1.2 In addition to being a specialized dictionary, Terminology D 123 is also a tool for managing the committee's terminology. This includes finding, eliminating, and preventing redundancies, that is, where two or more terms relating the same concept are defined in different words. Redundancies can also occur when one definition is used for two or more terms.

1.3 While the review for clarity and form are the responsibility of the terminology subcommittee, the concept of managing terminology is the broad responsibility of every writer of standards, specifically the task group leader and subcommittee chairman.

1.4 Subsequent to a listing of specific subcommittee compilations, this standard is comprised of the following sections that are listed in the order in which they appear.

1.4.1 Alphabetical listing of terms and respective definitions.

1.4.2 Ready reference guide.

1.4.3 Annex A1 Generic names and definitions of manufactured fibers.

1.4.4 Annex A2 Classification of manufactured and natural fibers.

1.4.5 Annex A3 Terms relating to the hand of fabrics.

1.4.6 Annex A4 Terminology revision procedures.

1.4.7 Annex A5 Industry accepted synonyms.

1.4.8 Appendix X1 Other sources of textile terminology.

2. Referenced Documents

2.1 *ASTM Standards:*

D 2050 Terminology Relating to Zippers (D13.54)[2]

D 3136 Terminology Relating to Care Labels for Textile and Leather Products Other Than Textile Floor Coverings and Upholstery (D13.62)[2]

D 3888 Terminology Relating to Open-End Spinning (D13.58)[2]

D 3990 Terminology Relating to Fabric Defects (D13.59)[3]

D 4391 Terminology Relating to Burning Behavior of Textiles (D13.92)[3]

D 4523 Terminology Relating to Leather-filled and Down-filled Products (D13.61)[3]

D 4845 Terminology Relating to Wool (D13.13)[3]

D 4848 Force, Deformation and Related Properties of Textiles (D13.57)[3]

D 4850 Terminology Relating to Fabric and Related Terms (D13.59)[3]

D 4920 Terminology Relating to Moisture in Textiles (D13.51)[3]

D 4965 Terminology of Seams and Seam Finishes in Home Sewing (D13.53)[3]

D 5038 Terminology of Textile Conservation (D13.53)[3]

D 5219 Terminology Relating to Body Dimensions for Apparel Sizing (D13.55)[3]

D 5253 Terminology of Writing Care Instructions and General Refurbishing Procedures for Textile Floor Coverings and Textile Upholstered Furniture (D13.62)[3]

D 5497 Terminology Relating to Buttons (D13.54)[3]

D 5646 Terminology of Basic Sewing Machine Stitches for Home Use (D13.53)[3]

D 5684 Terminology Relating to Pile Floor Covering (D13.21)[3]

3. Terminology

3.1 Alphabetical listing of terms with subcommittee jurisdiction and attribution for each term.

[1] This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.92 on Terminology.

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[2] *Annual Book of ASTM Standards*, Vol 07.01.

[3] *Annual Book of ASTM Standards*, Vol 07.02.

A-tuft, *n*—a single-pass process for aligning hook free fibers on the Fibroliner FL-101. **[D 13.11] D 5332**

abrasion, *n*—the wearing away of any part of a material by rubbing against another surface. **[D13.60] D 3884, D 3885, D 3886, D 4157, D 4158, D 4685, D 4966**

abrasion cycle, *n*—one complete movement across the surface of a material.

DISCUSSION—The complete movement for an abrasion cycle is dependent on the action of the abrasion machine and the test method used. It may consist of one back-and-forth unidirectional movement or one circular movement, or a combination of both. **[D13.60] D 3885**

abrasion mark, *n*—an area damaged by friction. **[D13.59] D 3990**

absolute humidity, *n*—the mass of water vapor present in a unit volume of air. (See **humidity** and **relative humidity**) **[D13.51] D 4920**

absorbent compound, *n—in textile cleaning*, sponge-like particles which, when saturated with water or dry solvent and detergent and brushed into the textile, remove soil from the textile. See **powder cleaner**. **[D13.62] D 5352**

absorbent pad, *n—for cleaning textile floor coverings*, a damp textile material (fabric, felt, sponge, or mop) used to agitate and wipe the pile and, in the process, absorb soil. **[D13.62] D 5352**

absorption, *n*—a process in which one material (the absorbent) takes in or absorbs another (the absorbate); as the absorption of moisture by fibers. (See also **adsorption,** and **moisture equilibrium for testing**. Compare **desorption** and **resorption**.) **[D13.51] D 4772, D 4920**

accelerated aging, *n—in textile processing and testing*, the use of controlled environmental conditions to promote rapid physical or chemical change in a textile **material**. **[D13.20] D 5427**

acceptable quality level (*AQL or* p_1), *n—in acceptance sampling*, the maximum fraction of nonconforming items at which the process average can be considered satisfactory; the process average at which the risk of rejection is called the producer's risk. **[D13.93] D 3777, D 4028, D 4271, D 4392**

acceptance number (*c*), *n—in acceptance sampling*, the maximum number of nonconforming items in a sample that allows the conclusion that the lot conforms to the specification. **[D13.93] D 3777, D 4271, D 4392**

acceptance sampling, *n*—sampling done to provide specimens for acceptance testing. **[D13.93] D 3777, D 4271, D 4392**

acceptance testing, *n*—testing performed to decide if a material meets acceptance criteria. **[D13.93] D 3777, D 4271, D 4392**

accuracy, *n—of a test method*, the degree of agreement between the true value of the property being tested (or an accepted standard value) and the average of many observations made according to the test method, preferably by many observers. (See also **bias** and **precision**.) **[D13.93] D 2905, D 2906, D 4697, D 4855**

acid content, *n—of felt*, the number of milliequivalents of acid present per unit weight of felt, measured under prescribed conditions. **[D13.13] D 461**

acromion, *n—in anatomy*, that part of the shoulder blade located at the end of the spine which articulates with the collar bone. (See also **shoulder joint**.) **[D13.55] D 5251**

across shoulder, *n—in body measurements*, the distance from shoulder joint to shoulder joint across the back. **[D13.55] D 5219**

acrylic fiber—See **acrylic** in Annex A1.

adhesion, *n*—the property denoting the ability of a material to resist delamination or separation into two or more layers. **[D13.19] D 1871, D 1877, D 4393, D 4776, D 4777**

adhesive treated-tire cord, *n*—a tire cord whose adhesion to rubber or other elastomer has been improved by the application of a dip followed by rapid drying and (normally) additional heat treatment. **[D13.19] D 5591**

adhesion, *n—in tire fabrics*, the force required to separate a textile material from rubber or other elastomer by a definite prescribed method. **[D13.19] D D2229, D 4393, D 4776, D 4777**

adsorption, *n*—a process in which the surface of a solid takes on or absorbs in an extremely thin layer molecules of gases, of dissolved substances, or of liquids with which it is in contact. (See also **absorption, moisture equilibrium of testing**. Compare **desorption** and **resorption**.) **[D13.51] D 4920**

afterflame, *n*—persistent flaming of a material after the ignition source has been removed. **[D13.92] D 123**

after-flame time, *n*—the length of time for which a material continues to flame after the ignition source has been removed. **[D13.92] D 4372, D 4391**

afterglow, *n*—glow in a material after the removal of an external ignition source or after the cessation (natural or induced) of flaming of the material. (See also **flame, glow,** and **smoldering**.) **[D13.92] D 4391**

afterglow time, *n*—the time afterglow continues after the cessation of flaming or after removal of the ignition source. **[D13.92] D 123**

air permeability, *n*—the rate of air flow passing perpendicular through a known area under a prescribed air pressure differential between the two surfaces of a material.

DISCUSSION—Air permeability of fabric at a stated pressure differential between two surfaces of the fabric is generally expressed in SI units as $cm^3/s/cm^2$ and in inch-pound units as $ft^3/min/ft^2$ calculated in operating conditions. (See **permeability, porosity**) **(D13.59) D 737**

air-supported roof, *n*—a fabric roof-system that is properly secured and primarily supported and held in place by air pressure. **[D13.59] D 4851**

air wicking, *n—in tires*, the passage of air longitudinally along or through yarns in a fabric that has been encased and cured in rubber or other elastomer, that is, air permeability in the plane of the fabric. **[D13.19] D 2692**

alkali solubility, *n—in wool*, the percent of clean wool that is soluble in a specified alkaline solution under controlled conditions of temperature and time. **[D13.13] D 1283**

alpaca, *n*—the fleece and fiber produced by the alpaca, an

animal of the genus Llama (*Lama glama pacus*). **[D13.13] D 2252**

American grain count, *n*—a direct yarn numbering system for expressing linear density, equal to the mass in grains per 120 yards of sliver or roving. **[D13.58] D 2260**

amount, *n—in cotton fiber testing with the Length Analyzer*, a measure of the thickness or pneumatic density of the test beard, proportional to the number of fibers present at various distances from the base of the specimen clamp jaws. **[D13.11] D 4604**

amount, *n—in cotton length testing with the Fibrograph*, a measure of the thickness, or optical density, of the test beard, proportional to the number of fibers present at various distances from the comb(s). **[D13.11] D 1447, D3817**

analysis of variance (ANOVA), *n*—a procedure for dividing the total variation of a set of data into two or more parts, one of which estimates the error due to selecting and testing specimens and the other part(s) possible sources of additional variation. **[D13.93] D 4854**

anidex fiber—See **anidex** in Annex A1.

animal fiber, *n*—any natural protein-base fiber. **[D13.13] D 1574, D4510**

ankle, *n—in anatomy*, the joint between the foot and the lower leg. **[D13.55] D 5219**

ankle girth, *n—in body measurements*, the circumference of the leg over the greatest prominence of the ankle. **[D13.55] D 5219**

ankle height, *n—in body measurements*, with the subject standing barefoot, the distance from the center of the prominent outside ankle bone to the floor. **[D13.55] D 5219**

aqueous extract, *n—in wool testing*, the solution obtained by digesting a material with water or with a sodium chloride solution to dissolve soluble materials. **[D13.13] D 2165**

aramid fiber—See **aramid** in Annex A1.

architectural-use, *n—in the building trade*, a descriptive term for fabrics used in fabric roof-systems or similar industrial applications. (See also **fabric roof-system.**) **[D13.59] D 4851**

arm length, *n—in body measurements*, with the arm bent at 90 degrees and the clenched fist placed on the hip, the distance from the shoulder joint along the outside of the arm over the elbow to the greatest prominence on the outside of the wrist. **[D13.55] D 5219**

armhole, *n—in garment construction*, the area of a garment through which the arm passes or into which a sleeve is fitted. (Compare **armscye**.) **[D13.55] D 5219**

armpit, *n—in anatomy*, the hollow under the junction of the arm and the shoulder. **[D13.55] D 5219**

armscye, *n—in garment construction*, the opening in a garment for the attachment of a fitted sleeve. (Compare **armhole**.) **[D13.55] D 5219**

armscye circumference, *n—in body measurements*, with the arm hanging down, the distance from the shoulder joint through the front-break point, the armpit, the back-break point and to the starting point. **[D13.55] D 5219**

assignable cause, *n*—a factor which contributes to variation and is feasible to detect and identify. **[D13.93] D 4467**

atmosphere for testing, *n*—air at ambient conditions of relative humidity and temperature in which tests or experiments are conducted. (See also **standard atmosphere for testing**.) **[D13.51] D 4920**

atmosphere for testing textiles, *n—for glass*, air maintained at a relative humidity of at least 48 % and no greater than 67 % and at a temperature of at least 20°C (68°F) and no greater than 25°C (77°F). **[D13.18] D 578, D 579, D 580, D 581, D 3374, D 3656, D 4028, D 4029, D 4030, D 4389, D 4909, D 4912, D 4963**

attached cushion, *n—for pile yarn floor covering*, a material, bonded to the backing fabric side of a pile yarn floor covering to provide additional dimensional stability, thickness, and padding. **[D13.21] D 3936, D 5684**

attached upholstery fabric, *n*—the exterior fabric covering secured to a furniture unit by the furniture manufacturer or custom upholsterer. (See **furniture coverings**) **[D13.63] D 4852**

attribute, *n*—a specific characteristic of a thing. (See **attribute data.**) **[D13.93] D 4271**

attribute data, *n*—observed values or determinations which indicate the presence or absence of specific characteristics. **[D13.93] D 4271, D 4697, D 4854**

automatic lock slider, *n—in zippers*, a slider that provides involuntary, positive locking action on the chain when the pull is released. **[D13.54] D 2050**

average, *n—for a series of observations*, the total divided by the number of observations. **[D13.93] D 4853**

average fiber diameter, *n—in wool and other animal fibers*, the average width of a group of fibers when measured on a projected image. **[D13.13] D 2130, D 2252, D 3991, D 3992**

azlon fiber—See **azlon** in Annex A1.

B-tuft, *n*—a two-pass process for aligning hooked fibers on the Fibroliner FL-101. **[D13.11] D 5332**

back breakpoint, *n—in anatomy*, the location on the back of the body where the arm separates from the body. **[D13.55] D 5219**

back coating, *n—in textile floor covering*, an adhesive compound applied for such purpose as locking pile yarn tufts into a carpet backing, bonding a secondary backing to a primary backing, or increasing fabric body or stiffness and increasing dimensional stability **[D13.21] D 418, D 4852, D 5684**

back side, *n—in textile materials*, the side of the material that faces inward in the completed object (Ant. **face side**). **[D13.53] D 4965**

back waist length, *n—in body measurements*, the vertical distance along the spine from the cervicale to the waist. **[D13.55] D 5219**

back width, *n—in body measurements*, the distance from back-breakpoint to back-breakpoint. **[D13.55] D 5219**

backing, *n—for pile yarn floor covering*, all materials in a pile yarn floor covering other than pile yarn. **[D13.21] D 5251, D 5252, D 5684**

backing fabric, *n—in textiles*,a fabric into which a pile yarn is inserted, or a reinforcing layer which is adhered to the reverse side of a fabric. **[D13.21] D 2646, D 5684, D 5848**

backing fabric, *n—in textile conservation*, a support textile fabric located behind the textile artifact. **[D13.53] D 5429**

bagging, *n*—a very heavy, loosely woven fabric used primarily for bale covering, woven from heavy, tightly twisted roving, or fibrillated continuous filament yarns. (principally cotton and jute). **[D13.59] D 4850**

bail, *n—in zippers*, a portion or portions of the slider to which the pull or pulls are attached. **[D13.54] D 2050**

bale (jute), *n*—a bag, sack, etc., containing packages of yarn. **[D13.16] D 541**

barb, *n—in down*, the primary structure of plumage emanating from a quill point of a down cluster. **[D13.61] D 4523**

barb, *n—in feathers*, the primary structure of plumage emanating from the quill of a feather. **[D13.61] D 4523**

barré, *n*—an unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric or to the courses of circular knit fabric. (Compare **warp streaks** and **mixed filling**, see **filling blend**.) **[D13.59] D 3990**

bast fibers, *n—in flax stems*, fibers found in the layer of phloem of the flax stem between the inner xylem tissue and the epidermis tissue. **[D13.17]**

bast and leaf fiber, *n*—fiber derived from the inner fibrous bark and the hard coarse leaves of dicotyledonous plants such as flax, hemp, jute, and abaca. **[D13.16] D 1233**

bath mat, *n*—an absorbent textile floor covering normally used in the bathroom as a pad on which to step when getting out of the tub or shower. **[D13.62] D 5253**

bath rug, *n*—a scatter rug used in the bathroom. **[D13.62] D 5253**

bath sheet, *n*—a textile terry product with end hems or fringes and side hems or selvages that is generally much larger than a bath towel. **[D13.63] D 5433**

bath towel, *n*—a textile terry product with end hems or fringes and side hems or selvages, which is used to dry a person's body after bathing or swimming. **[D13.63] D 5433**

batting, *n*—a textile filling material consisting of a continuous web of fibers formed by carding, garnetting, air laying, or other means. **[D13.61] D 4770**

batting integrity, *n*—the ability of a textile filling material to resist distortion or change when subjected to multiple home launderings or drycleanings. **[D13.61] D 4770**

bead, *n—in a separate element zipper*, an enlarged section on inner edge of each tape to which interlockable elements are affixed. **[D13.54] D 2050**

bead, *n—in continuous element zippers*, an optional enlarged section of the tape located at the outer edge of the continuous interlockable elements and against which the slider flanges bear. **[D13.54] D 2050**

beam, *n—in textiles*, a large spool containing many ends of yarn wound parallel, and used for such purposes as weaving or warp knitting. **[D13.58] D 2258**

beam set, *n—in textiles*, one or more beams of yarn in a single shipment to be further processed together for a specific end use. **[D13.58] D 2258**

bedcovering, *n*—a textile product used on a bed over the sheets for warmth or decoration. **[D13.63] D 4721**

bedspread, *n*—a type of bedcovering that is placed over the blankets and sheets for appearance and warmth. **[D13.63] D 4037, D 4721**

bench marks, *n*—marks placed on a specimen to define gage length, that is, the portion of the specimen that will be evaluated in a specific test. **[D13.58] D 76**

bending length, *n—(1) general*—a measure of the interaction between fabric weight and fabric stiffness as shown by the way in which a fabric bends under its own weight. It reflects the stiffness of a fabric when bent in one plane under the force of gravity, and is one component of drape.

(2) specific—the cube root of the ratio of the flexural rigidity to the weight per unit area. **[D13.60] D 1388**

bias, *n—in statistics*, a constant or systematic error in test results. **[D13.93] D 2905, D 2906, D 4697, D 4855**

bicomponent fiber, *n*—a fiber consisting of two polymers which are chemically different, physically different, or both. **[D13.58] D 629, D 4466**

binding site, *n—for pile yarn floor covering*, a place at which the pile yarn is, or can be, bound to the backing fabric. **[D13.21] D 5684, D 5848**

binomial distribution, *n*—the frequency distribution which has the probability function:

$$P(r) = (n!/[r!(n - r)!]p^r q^{n-r} \quad (1)$$

where:

$P(r)$ = probability of obtaining exactly r "successes" in n independent trials,

p = probability, constant from trial to trial, of obtaining a "success" in a single trial, and

q = $1 - p$.

[D13.93] D 4686

birdseye, *n—in knitted fabrics*, an unintentional tuck stitch. **[D13.59] D 3990**

birefringence, *n*—(*double refraction*) a property of anisotropic materials which manifests itself as a splitting of a light ray into components having different vibration directions which are transmitted at different velocities. **[D13.51] D 276**

black felt, *n*—those classifications of felt manufactured to various shades of the color black. **[D13.13] D 2475**

blanket, *n—for bedding*, an unquilted fabric covering designed primarily to provide thermal insulation. **[D13.63] D 4151, D 4721, D 5432**

bleach, *n—in care of textiles*, a product for brightening and aiding in the removal of soils and stains from textile materials by oxidation that is inclusive of both chlorine and non-chlorine products. **[D13.62] D 3136, D 5253,**

blending plan, *n*—the instructions for mixing fibers during specimen preparation. **[D13.11] D 5332**

blind hem stitch, *n—in home sewing*, a complex machine stitch pattern consisting of small groups of straight or narrow zigzag stitches separated by a wide zigzag stitch unit at consistent intervals. **[D13.53] D 5646**

blister, *n—in bonded, fused, or laminated fabrics*, a bulge, swelling, or similar surface condition on either the face fabric or the backing fabric characterized by the fabric being

raised from the plane of the underlying component over a limited area to give a puffy appearance. **[D13.54] D 2724, D 3135**

block, *n—in experimenting*, a group of units that is relatively homogeneous within itself, but may differ from other similar groups. **[D13.93] D 4853**

block, *v*—to align warp and weft yarns at right angles, by some form of manipulation. **[D13.53] D 5429**

blocking, *n—of coated fiber glass yarn solar screening*, an undesired adhesion between touching layers of a material, such as occurs under moderate pressure, during storage or use. **[D13.18] D 4028**

blocking, *n*—the measurement of the development of surface tack and the thermal softening point of the material. **[D13.56] D 3690**

blotch, *n*—an irregularly shaped offcolored area. **[D13.59] D 3990**

body dimension, *n—in garment construction*, a body measurement which can be used to build a sizing system or to select an appropriately sized garment. (See also **sizing system**.) **[D13.55] D 5219**

body measurements, *n—in anthropometry*, a standardized distance between two specified points on the human anatomy. **[D13.55] D 5219**

body weight, *n—in body measurements*, mass in kilograms (pounds). **[D13.55] D 5219**

bond strength, *n—of bonded, fused, or laminated fabrics*, the tensile force expressed in ounces per 25 mm (1 in.) of width, required to separate the component layers under specified conditions. **[D13.54] D 2724, D 3135**

bonded fabric, *n*—a layered fabric structure wherein a face or shell fabric is joined to a backing fabric, such as tricot, with an adhesive that does not significantly add to the thickness of the combined fabrics. (See also **laminated fabric, coated fabric**.) **[D13.54] D 2724, D 3135**

bonnet, *n—in cleaning pile floor coverings*, an absorbent pad which can be mounted under a rotary shampoo machine. **[D13.62] D 5253**

book fold, *n*—a fabric doubled selvage to selvage, then folded back and forth upon itself in predetermined lengths. (See also **shoe fold**.)

DISCUSSION—When the piece is completed, the fold-edges on each side are folded once more upon themselves so that the fold-edges are inside, forming a compact package as long as one half the width of the **fabric**. **[D13.59] D 4850**

bottom assembly, *n*—the components of the lowermost part of a slide fastener which determine whether the slide fastener will be non-separable or separable. (See also **non-separable zipper** and **separable zipper**.) **[D13.54] D 2050**

bottom stop, *n*—a part affixed to both stringers immediately below, or over, the chain, holding the two stringers together at the bottom and preventing the slider from leaving the chain. **[D13.54] D 2050**

bound seam-finish, *n*—a finish for the raw edges of a plain seam, in which another fabric encloses the raw edges of one or more seam allowances. (Compare **Hong Kong seam-finish**.) **[D13.53] D 4965**

boundary friction, *n*—friction at low sliding speeds (0.02 m/min or less) where lubrication occurs under thin-film lubricant conditions. **[D13.58] D 3412**

bow, *n*—a fabric condition resulting when filling yarns or knitted courses are displaced from a line perpendicular to the selvages and form one or more arcs across the width of the fabric. (See also **double bow**.) **[D13.60] D 3882, D 3990**

braid, *n*—a narrow tubular or flat fabric produced by intertwining a single set of yarns according to a definite pattern (Maypole process). **[D13.18] D 581**

braided fabric, *n*—a structure produced by interlacing three or more ends of yarns in a manner such that the paths of the yarns are diagonal to the vertical axis of the fabric. **[D13.59] D 4850**

braided rope, *n*—a cylindrically produced rope made by intertwining, maypole fashion, several to many strands according to a definite pattern with adjacent strands normally containing yarns of the opposite twist. **[D13.16] D 4268**

break factor, *n—in yarn testing*, the comparative breaking load of a skein of yarn adjusted for the linear density of the yarn expressed in an indirect system. **[D13.58] D 1578**

breaking, *n*—the crushing of the structure of the stem; loosening the bond between the fiber bundles and shives and breaking the shives into short pieces to facilitate its removal. **[D13.17]**

breaking force, *n*—the maximum force applied to a material carried to rupture. (Compare **breaking point.**. See **breaking strength.**) **[D13.58] D 885, D 1578, D 2970, D 3217, D 3218, D 3822, D 4848, D 4975 D 5035**

breaking point, *n—on a force-extension or force-elongation curve, or stress-strain curve*, the point corresponding with the breaking force or the breaking stress in a tensile test. (Compare **breaking force.**) **[D13.58] D 4848**

breaking strength, *n*—the ability or capacity of a specific material to withstand the ultimate tensile load or force required for rupture. (See also **tensile strength**) **[D13.58] D 885**

breaking tenacity, *n*—the tenacity at the breaking force. **[D13.58] D 885, D 1294, D 2101, D 2256, D 2524, D 2970, D 3217, D 3218, D 3822, D 4604, D 4848**

breaking toughness, *n*—the actual work per unit volume or per unit mass of material that is required to rupture the material. **[D13.58] D 885, D 885M, D 3822**

breakout pressure, *n—for inflatable restraints*, the pressure level during deployment which ruptures the module cover. **[D13.20] D 5428**

bridge, *n—in buttons*, the area between the holes partially covered by the sewing threads with dimensions varying upon design and end use. **[D13.54] D 5497**

bridge top stop, *n—in zippers*, a part affixed immediately above the chain, holding the tops of the two stringers together and preventing the slider from leaving the chain. **[D13.54] D 2050**

broken end, *n—in woven fabrics*, a void in the warp direction due to yarn breakage. **[D13.59] D 3990**

broken filament, *n—in multifilament yarn*, breaks in one or more filaments. **[D13.58] D 3990**

broken pick, *n—in woven fabrics*, a discontinuity in the filling direction caused by a break or cut in the filling yarn.

[D13.59] D 3990

bruise, *n—in fabrics*, an area that has been subjected to impact or pressure, which differs from the adjacent normal fabric. **[D13.59] D 3990**

brush, *n*—a hand-held cleaning tool consisting of a base into which bristles are inserted. **[D13.62] D 5253**

brush, *vt—in refurbishing textiles*, (1) to use a brush to remove surface particulate soils, (2) work a cleaning solution or spot cleaning agent into carpet pile or upholstery fabric, or (3) restore the appearance of pile fabrics. **[D13.62] D 5253**

bulk density, *n*—apparent mass per unit volume. **[D13.51] D 1518**

bulk sample, *n—in the sampling of bulk material*, one or more portions which (*1*) are taken from material that does not consist of separately identifiable units and (*2*) can be identified after sampling as separate or composited units. (Compare to **discrete sample, lot sample.**) **[D13.93] D 4271**

bulk shrinkage, *n*—a measure of potential stretch and power of stretch yarns or a measure of bulk of textured-set yarns. **[D13.58] D 4031**

bunch, *n*—a defect in a yarn characterized by a segment not over 6 mm (¼in.) in length that shows an abrupt increase in diameter caused by more fibers matted in this particular place. (See **slug, slub.**) **[D13.58] D 2255**

buried pile yarn, *n—for coated pile yarn floor covering*, that portion of the pile tuft elements which remains after the tuft legs have been removed by shearing. **[D13.21] D 418**

burlap, *n*—a coarse, heavy, plain weave fabric of coarse single jute yarn. **[D13.59] D 4850**

burning behavior, *n*—all the changes that take place when materials or products are exposed to a specified ignition source. **[D13.92] D 4391**

burr-wool waste, *n*—waste removed by the burr guard of cards or burr pickers having a very short fiber and full of burrs or seeds. **[D13.13] D 4845**

bursting strength, *n*—the force or pressure required to rupture a fabric by distending it with a force, applied at right angles to the plane of the fabric, under specified conditions. **[D13.59] D 3786, D 3787, D 3887**

bust girth, *n—in body measurements*, the circumference of the body over the fullest part of the breasts and parallel to the floor. (Compare **chest girth**.) **[D13.55] D 5219**

bust point to bust point, *n—in body measurements*, the distance across the front from the apex of one breast to the apex of the other. **[D13.55] D 5219**

button, *n*—a knob, disc, or similar object which when forced through a narrow opening or buttonhole, fastens one part of a garment or other flexible substrate to another. (See also **sew-through flange button**.) **[D13.54] D 5171, D 5497**

buttonhole stitch, *n—in home sewing*, a complex machine stitch pattern made by coordinated motions of needle and feed, appearing as very close stitches forming a narrow rectangle of stitching that is usually composed of four stitch segments, one on each side and on each of the two ends of the rectangle. **[D13.53] D 5645**

cable twist, *n*—the construction of cabled yarn, cord, or rope in which each successive twist is in the opposite direction to the preceding twist; an S/Z/S or Z/S/Z construction. **[D13.58] D 1423**

calf girth, *n—in body measurements*, the maximum circumference around the leg between the knee and ankle, parallel to the floor. **[D13.55] D 5219**

calibrate, *v*—to determine and record the relationship between a set of standard units of measure and the output of an instrument or test procedure. **[D13.58] D 76, D 4697**

calibration, *n*—the act or process of calibrating; the recorded relationship resulting from calibrating. **[D13.93] D 4697**

calibration cotton standards, *n*—cotton samples taken from blended bulk source on which fiber properties have been determined under the International Calibration Cotton Standards Program. **[D13.11] D 1448, D 3025, D 3818, D 4604**

cam lock slider, *n—in zippers*, a slider that incorporates a curled projection or projections on the pull that extends through a window or windows to effect a locking action by pressing against the interlocking elements when the cam lock slider is in the locked position. **[D13.54] D 2050**

camping tentage, *n*—any portable temporary shelter or structure designed to protect persons from the elements, all or a portion of the covering which is made of fabric or other pliable materials. **[D13.52] D 4372**

capacity, *n—for tensile testing machines*, the maximum force for which the machine is designed. **[D13.58] D 76**

carbonized and neutralized wool, *n*—a term descriptive of scoured wool processed to destroy cellulosic impurities by treating with a mineral acid or an acid salt, drying and baking, crushing, and dusting out the embrittled cellulosic matter followed by neutralization of the acidified wool. **[D13.13] D 2118**

carded wool, *n*—scoured wool which has been processed through a carding machine. **[D13.13] D 1575**

care instructions, *n—in textiles*, a series of directions that describes practices which should refurbish a product without adverse effects and warn against any part of the directions which one could reasonably be expected to use that my harm the item. **[D13.62] D 3136, D 3938, D 5253, D 5489**

care label, *n—in textiles*,a label or other affixed instructions that report how a product should be refurbished **[D13.62] D 3136, D 5253**

care procedure, *n—in textiles*, one or more refurbishing methods to which products may be subjected for soil and stain removal and aesthetic improvement such as appearance restoration or hand. **[D13.62] D 3136, D 5253**

care symbol, *n*—a pictorial symbol that gives directions for refurbishing a consumer textile product. **[D13.62] D 5489**

career apparel, *n*—garments, the styling and performance of which are designed for various end uses so as to be suitable for on-the-job wear in a variety of businesses and professions. (See also **dress career apparel** and **vocational career apparel.**) **[D13.56] D 3995, D 4232**

carpet, *n*—all textile floor coverings not designated as rugs. **[D13.21] D 5253, D 5684**

carpet module, *n*—textile floor covering sections usually

having dimensions of less than 1 m^2. **[D13.21] D 1335, D 5684**

carpet sweeper, *n*—a manually powered machine which has rotary brushes and which is used for light surface cleaning of carpets and rugs. **[D13.62] D 5253**

carrier, *n—in braiding machinery*, that part of a braiding machine that holds the package of yarn, thread, or cord, and carries the yarn when the machine is operated. **[D13.18] D 581**

case, *n—in textiles*, a shipping unit, usually a carton, box, bale, or other container holding a number of yarn packages. **[D13.58] D 2258**

cashmere, *n—in roving, yarn, or fabrics*, cashmere hair or products made therewith having a cashmere coarse-hair content not exceeding a specified maximum percentage by length. **[D13.13] D 2816, D 2817**

cashmere coarse-hair, *n*—those coarse fibers in cashmere hair having widths greater than 30 µm. **[D13.13] D 2816, D 2817**

cashmere coarse-hair content, *n*—the total length of the cashmere coarse-hair fibers that are present, expressed as a percentage of the total length of all the cashmere hair fibers; that is, the percentage by length of cashmere coarse-hair in cashmere hair. **[D13.13] D 2816, D 2817**

cashmere down, *n*—those fibers in cashmere hair widths of 30 µm or less. **[D13.13] D 2816, D 2817**

cashmere hair, *n*—the fibers produced by a form of goat (*Capra hircus*) indigenous to Asia and known as the cashmere goat. **[D13.13] D 2816, D 2817**

center back waist length, *n—in body measurements*, the vertical distance along the spine from the cervicale to the waist. **[D13.55] D 5219**

center front waist length, *n—in body measurements*, the vertical distance from the neck baseline at the center front to the waist level. **[D13.55] D 5219**

cervicale, *n—in anatomy*, the prominent point of the seventh or lowest neck vertebra at the back of the body. **[D13.55] D 5219**

cervicale to bust point, *n—in body measurements*, the distance from the cervicale around the base of the neck and down to the bust point. **[D13.55] D 5219**

cervical to wrist, *n—in body measurements*, with the arm bent, the distance from the cervical to the shoulder joints, along the outside of the arm, over the elbow to the greater prominence on the outside of the wrist. **[D13.55] D 5219**

chafer fabric, *n—in tire fabrics*, a woven fabric, usually coated with unvulcanized rubber, which is laid around the bead of a tire before vulcanization. **[D13.19] D 122, D 2692, D 4393**

chain, *n—in zippers*, the assemblage formed by interlocking several elements of two stringers. **[D13.54] D 2050**

chain sampling, *n—in acceptance sampling*, a sampling plan for which the decision to accept or reject a lot is based in part on the results of inspection of the lot and in part on the results of inspection of the immediately preceding lots. **[D13.93] D 3777**

chain thickness, *n—in zippers*, the measurement from front to back of the chain. **[D13.54] D 2050**

chain width, *n*—the measurement between the shoulders of the interlocked elements or between the outermost edges of the bead if the bead extends beyond the elements. **[D13.54] D 2050**

characteristic, *n*—a property of items in a sample or population which, when measured, counted, or otherwise observed, helps to distinguish between the items. **[D13.93] D 2906, D 4271**

charring, *n*—the formation of carbonaceous residue as the result of pyrolysis or incomplete combustion. **[D13.92] D 4391**

chemical wash, *n—in rug cleaning*, a specialized professional process used on oriental rugs. **[D13.62] D 5253**

chest girth, *n—in body measurements*, the circumference of the body over the shoulder blades, under the arms and across the upper chest. (Compare **bust girth**.) **[D13.55] D 5219**

chlorine bleach, *n*—a bleach that releases the hypochlorite ion in solution, for example, sodium hypochlorite. **[D13.62] D 3136**

chopped strand, *n—in glass textiles*, a strand made from short predetermined lengths of cut continuous filament and used as a reinforcing material. (See also **strand**.) **[D13.18] D 578**

chord modulus, *n*—in a *stress-strain curve*, the ratio of the change in stress to the change in strain between two specified points on the curve. **[D13.58] D 885, D 3822, D 4848**

circular bend, *n*—simultaneous, multidirectional deformation of a fabric in which one face of a flat specimen becomes concave and the other becomes convex. **[D13.60] D 4032**

clamp, *n*—that part of a testing machine used to grip the specimen by means of suitable jaws. **[D13.58] D 76**

clean-finish seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, in which the raw seam allowance is folded under and edge stitched. **[D13.53] D 4965**

clean wool fiber present, *n—in raw wool*, the mass of wool base present in the raw wool, adjusted to a moisture content of 12 %, an alcohol-extractable content of 1.5 %, and a mineral matter content of 0.5 %. **[D13.13] D 584, D 1060, D 1334**

cleaning agent, *n*—a chemical compound or formulation of several compounds which loosens, disperses, dissolves, or emulsies soil to facilitate removal by mechanical action. **[D13.62] D 3136, D 4852, D 5253**

clip mark, *n*—a visible deformation near the edge of a fabric parallel with the lengthwise direction caused by pressure exerted by a clasping device on a clip tenter frame. (See also **pin mark.**) **[D13.59] D 3990**

clo, *n*—unit of thermal resistance equal to 0.155 Km^2/W. **[D13.51] D 1518**

closed-face fabric, *n*—a face or shell fabric of closed construction so that no open-face areas appear. **[D13.54] D 3135**

cloth, *n*—any textile fabric, but especially one designed for apparel, domestic, or industrial use. (See also **fabric**.) **[D13.59] D 4850**

coarse end, *n*—a larger than normal diameter warp end. (Compare **fine end**.) **[D13.59] D 3990**

coarse pick, *n—in woven fabrics*, one or more picks of larger diameter than the normal filling yarn in the fabric. **[D13.59] D 3990**

coat, *n*—an outer garment which covers at least the upper half of the body, has sleeves and a front opening, and is usually worn over another garment, such as a shirt or dress. **[D13.56] D 3778**

coated fabric, *n*—a flexible material composed of a fabric and any adherent polymeric material applied to one or both surfaces. (See also **laminated fabric**) **[D13.59, D13.20] D 4850, D 4851, D 5446**

cockles, *n—in yarns*, irregular, thick, uneven lumps. **[D13.58] D 2255, D3990**

coefficient of friction, *n*—the ratio of the tangential force that is needed to maintain uniform relative motion between two contacting surfaces to the perpendicular force holding them in contact. **[D13.58] D 3108, D 3412**

coefficient of length variation, *n*—a measure of fiber length distribution. **[D13.11] D 1440, D 5332**

coefficient of variation, CV, *n*—a measure of the dispersion of observed values equal to the standard deviation for the values divided by the average of the values; may be expressed as a percentage of the average (CV %). **[D13.93] D 1440, D 2905**

coefficient of variation unevenness, *n—in textiles*, the standard deviation of the linear densities over which unevenness is measured expressed as a percentage of the average linear density for the total length within which unevenness is measured. (See also **unevenness** and **mean deviation unevenness.**) **[D13.58] D 1425**

cohesive force, *n—in a textile strand*, the force required to overcome fiber cohesion as the strand is being reduced in linear density. **[D13.58] D 2612, D 4120**

collecting surface, *n—in the rotor of an open-end spinning machine*, that portion of the internal surface of the rotor, often in the form of a groove, in which the fibers are condensed for assembly into yarn. **[D13.58] D 3888**

color bleeding, *n*—the loss of color from a dyed fabric when immersed in water, drycleaning solvent, or similar liquid medium, with consequent coloring of the liquid medium. (Compare **color staining, crocking**.) **[D13.59] D 3990**

color contrast, *n—in textiles*, a general term for a visible color difference between two adjacent areas.

DISCUSSION—**for the purpose of test methods D 3939 and D 5362**, a color contrast is a visible color difference between a snag and the immediate surrounding area of the fabric that has no defects. Color contrasts often occur when printed fabrics are snagged. **[D13.59] D 3939, D 5362**

color grading, *n*—the act of identifying a specimen by a color grade or color score that is specific to the color and the material graded. **[D13.11] D 1684**

color lamp, *n—in color determination of cotton with a Color Meter*, a lamp with a specific energy output function used in conjunction with special tristimulus filters to obtain a desired response function. **[D13.11] D 4604**

color meter, *n*—an instrument which measures the fiber sample color as presented in the viewing window, in terms of the tristimulus values *Y* and *Z* and transmits these values to the IC/TC for further processing. **[D13.11] D 4604**

color space, *n—specific to this standard*, the daylight color of opaque specimens are represented by points in a space in terms of three color scales: reflectance, R_d, and the chromaticity coordinates for redness or greenness, $\pm a$, and yellowness or blueness, $\pm b$. **[D13.11] D 2253**

color stability, *n—in coated glass textiles*, the ability of the applied coating to resist fading from exposure to sunlight and water. **[D13.18] D 4909**

color staining, *n*—the undesired pickup of color by a fabric: (*1*) when immersed in water, drycleaning solvent, or similar liquid medium, that contains dyestuffs or coloring material not intended for coloring the fabric, or (*2*) by direct contact with other dyed material from which color is transferred by bleeding or sublimation. (Compare **crocking** and **color bleeding.**) **[D13.59] D 3990**

colored fiber, *n—in wool top*, any fiber the color or shade of which differs from the normal color or shade of the fiber mass of the sample. **[D13.13] D 1770, D 4845**

colorfastness, *n*—the resistance of a material to change in any of its color characteristics, to transfer its colorant(s) to adjacent materials, or both, as the result of exposure of the material to any real or simulated environment that might be encountered during processing, storage, use or testing of the material. **[D13.58] D 204**

comber/brusher, *n*—an instrument which prepares the test beard of fibers for length, length uniformity, strength, and elongation measurements by combing the test specimen to remove loose or unclamped fibers and paralleling the individually clamped fibers, and by brushing the clamped fibers to remove fiber crimp and smooth the test beard of cotton. **[D13.11] D 4604**

combing, *n—in flax*, the processing of two so as to produce tops or sliver which have the staple length and width suitable for use in the worsted spinning system. **[D13.17]**

combing wool, *n*—wool that is strong and strictly of combing length, that is, 2 in. (50 mm) or more. **[D13.13] D 4845**

combustible textile, *n*—a textile that will ignite and burn or that will give off vapors that will ignite and burn when subjected to external sources of ignition. (See **noncombustible textile**) **[D13.92] D 1230, D 4391**

combustion, *n*—a chemical process of oxidation that occurs at a rate fast enough to produce heat and usually light either as glow or flames. **[D13.92] D 4391**

comforter, *n*—a bedcovering assembly, consisting of an insulating filler secured between two layers of fabric, used primarily to reduce heat loss. **[D13.63] D 4721, D 4769**

commercial allowance, *n*—an arbitrary value equal to the commercial moisture regain plus a specified allowance for finish, used with the mass of scoured, oven-dried yarn, to compute (1) yarn linear density, (2) the commercial or legal mass of a shipment or delivery of any specific textile material (see also **commercial moisture regain**) or (3) the mass of a specific component in the analysis of fiber blends. **[D13.58] D 1907, D 2494, D 3887, D 4920**

commercial composition, *n—in wool*, the percentages by weight of wool base, moisture, and other non-wool base

components in wool to which a specific commercial designation is applied. **[D13.13] D 2720**

commercial designation, *n—in wool*, a term applied to a lot of wool in a stated form, and having a specified commercial composition. **[D13.13] D 2720**

commercial laundering—a process by which textile products or specimens may be washed, bleached, rinsed, dried, and pressed typically at higher temperatures, higher pH and longer times than used for home laundering. **[D13.62] D 3136**

commercial mass, *n*—billed mass as determined by a generally accepted method or as agreed upon between the purchaser and supplier. **[D13.58] D 2494, D 2720, D 3887**

commercial moisture content, *n—for wool*, the moisture calculated as a percentage of the weight of the wool, top, noils, yarn, fabric, etc., in the "as-is" condition; that is, containing whatever moisture, oil, grease, or other extraneous matter that may be present. **[D13.13] D 2118, D 4920**

commercial moisture regain, *n*—a formally adopted arbitrary value, to be used with the oven-dried mass of textile fibers, when calculating the commercial mass of a shipment or delivery. **[D13.51] D 1907, D 1909, D 2494, D 2654, D 3887, D 4920**

complex seam, *n*—a seam made in two or more steps. (Ant. **plain seam**.) **[D13.53] D 4965**

component, *n—as used with textile fiber polymers*, a polymer with distinguishable properties. **[D13.58] D 4466**

components, *n—for pile yarn floor covering*, the individual yarn or fabric elements into which a pile yarn floor covering an be separated **[D13.21] D 5684, D 5793**

component of variance, *n*—a part of a total variance identified with a specified source of variability. **[D13.93] D 4392, D 4854**

components, *n—for pile yarn floor covering*, the individual yarn or fabric elements into which a pile yarn floor covering can be dissected. **[D13.21] D 418, D 5684**

compression molded button, *n*—a button or button blank which is produced by compression molding. **[D13.54] D 5497**

compression molding, *n*—the method of molding a material already in a confined cavity by applying pressure and usually heat. **[D13.54] D 5497**

condition, *v*—to bring a material to moisture equilibrium with a specified atmosphere. **[D13.51] D 4920**

cone, *n*—in *textiles*, (1) a yarn holder or bobbin of conical shape used as a core for a yarn package of conical form, also called a cone core. (2) the yarn package obtained when yarn is wound upon a cone core. **[D13.58] D 2258**

confidence interval, *n*—an interval estimate of a population parameter computed so that the statement "the population parameter lies in this interval" will be true, on the average, in a stated proportion of the times such statements are made. **[D13.93] D 4855**

confidence level, *n*—the stated proportion of times the confidence interval is expected to include the population parameter. **[D13.93] D 2906, D 4855**

confidence limits, *n*—the two statistics that define the ends of a confidence interval. **[D13.93] D 4855**

connecting ring, *n—in zippers*, a device shaped like the letter "D" used to secure a pull, having more than one component in its design, to the bail of the slider. **[D13.54] D 2050**

conservation, *n*—the examination, preservation, and restoration of cultural objects with minimal sacrifice of their aesthetic and historic integrity. **[D13.53] D 5038**

conservator, *n*—a person whose activity involves the science, technology, and documentation associated with the conservation of cultural objects. **[D13.53] D 5038**

constant-rate-of-extension type tensile testing machine (*CRE***),** *n*— a testing machine in which the rate of increase of specimen length is uniform with time. **[D13.21] D 1294, D 1335, D 1682, D 2524, D 3936, D 5034, D 5035, D 5684**

constant-rate-of-extension type tensile testing machine (*CRE***),** *n—in tensile testing*, an apparatus in which the pulling clamp moves at a uniform rate, and the force-measuring mechanism moves a negligible distance with increasing force, less than 0.13 mm (0.005 in.). **[D13.58] D 76, D 1294, D 1682, D 2524, D 5034, D 5035**

constant-rate-of-load tensile testing machine (*CRL***),** *n—in tensile testing*, an apparatus in which the rate of increase of the force is uniform with time after the first 3 s and the specimen is free to elongate, this elongation dependent on the extension characteristics of the specimen at any applied force. **[D13.58] D 76, D 1294, D 1682, D 2524, D 5035**

constant-rate-of-traverse tensile testing machine (*CRT***),** *n—in tensile testing*, an apparatus in which the pulling clamp moves at a uniform rate and the force is applied through the other clamp which moves appreciably to actuate a weighing mechanism, so that the rate of increase of force or extension that is usually not constant and is dependent upon the extension characteristics of the specimen. **[D13.58] D 76, D 1294, D 1682, D 2524, D 3787, D 5034, D 5035**

constructional units, *n—in pile floor covering*, the needles, pitch, rows, shot, etc. into which the warp and filling yarns are commonly grouped. **[D13.58] D 418**

consumer care, *n—of consumer textile products*, cleaning and maintenance procedures as customarily undertaken by the ultimate user. **[D13.62] D 3136, D 5253**

consumer textile product, *n*—a textile product intended to satisfy human wants and needs. **[D13.62] D 3136, D 5489**

consumer's risk (β)**,** *n*— the probability of accepting a lot when the process average is at the limiting quality level. **[D13.93] D 3777, D 4271**

container, *n*—a receptacle designed to hold a material, or to give integrity to the material. **[D13.58] D 3333**

continuous element, *n*—a configured element formed continuously along a length of monofilament. **[D13.54] D 2050**

continuous element zipper, *n—in zippers*, a zipper consisting of two continuously formed elements, each attached to one of the opposing edges of two tapes, which are engaged and disengaged by the movement of a slider. (Compare **separate element zipper**.) **[D13.54] D 2050**

continuous filament yarn, *n*—a yarn made of filaments that extend substantially throughout the length of the yarn.

[D13.18] D 578, D 579, D 580, D 581, D 4029, D 4389

continuous variate, *n*—a variate that is a measurement based on a scale that is assumed to be continuous. **[D13.93] D 4271**

contract furniture, *n*—furniture manufactured for use in non-household applications. **[D13.56] D 4771**

control limits, *n*—predetermined ranges based on the variability of past observations between which the instrument data for a test must fall to be considered valid. **[D13.11] D 4604**

control undercover garment, *n*—a garment having a known history, the performance of which in a specific end-use has been established previously, and which is used as a standard of comparison. **[D13.53] D 3181**

conventional blanket, *n*—a blanket woven in either a plain or twill weave that is napped on both sides. **[D13.63] D 5432**

cord, *n*— a twisted or formed structure composed of one or more single or plied filaments, strands, or yarns of organic polymer or inorganic materials. **[D13.19] D 885, D 4776, D 5591**

cord, *n—in zippers*, a strand of multiple yarns for use in forming a bead. **[D13.54] D 2050**

cord, *n—of glass fiber*, a strand made by combining multiple ends of filament strands, including cabled yarns, primarily for structural application. **[D13.18] D 4030**

cord twist, *n*—the amount of twist in a cord made from two or more single or plied yarns. **[D13.19] D 885, D 2970**

corduroy, *n*—a filling cut-pile fabric in which the cut fibers form a surface of wales (rounded cords or ribs) which usually run warpwise. **[D13.59] D 4685, D 4850**

core, *n—in sampling fiber packages*, the portion of wool or other fiber obtained using a sampling tube. **[D13.13] D 1060**

core, *n*—a filament or strand that serves as an extended axis about which other elements can be wound. **[D13.19] D 2969, D 4845**

core-spun yarn, *n*—a compound structure in which a filament or strand serves as an axis around which a cover of either loose fiber or a yarn is wound. **[D13.58] D 204**

cored braid, *n—in rope*, a hollow braid construction, either plain or twill, the center of which is filled with yarns which are not braided. **[D13.16] D 4268**

cortex, *n—in mammalian hair fibers*, the principal body of the fiber made up of elongated cells. **[D13.13] D 4510**

cotton, *n*—a vegetable seed fiber consisting of unicellular hairs attached to the seed of several species of the genus *Gossypium* of the family Malvaceae. **[D13.11] D 1445**

cotton color diagram, *n*—a diagram showing the color ranges of standards officially established by the U.S. Department of Agriculture for the various grades of cotton in relation to scales of reflectance. R_d, on the vertical axis, and yellowness, + *b*, on the horizontal axis. **[D13.11] D 4604**

cotton count, *n*—an indirect yarn numbering system generally used in the cotton system equal to the number of 840-yd lengths of yarn per pound. **[D13.58] D 1059, D 2260**

cotton fiber—See Table A2.4 in Annex A2.

cotton maturity, *n*—the degree of fiber wall development.

[D13.11] D 1442, D 2480, D 3817, D 3818

cotton system, *n*—a spinning system adapted to fibers less than 65 mm (2.5 in.) in length. **[D13.58] D 2645**

cotton waste, *n*—material removed from seed cotton, ginned lint, or stock in process by any cleaning or processing machinery and usually consisting of undesirable fibers or a mixture of cotton fibers with foreign matter. **[D13.11] D 2495**

cottonizing, *n—in flax*, the processing of flax fiber so as to make it suitable for use in the cotton spinning system. **[D13.17]**

count, *n—in woven textiles*, the number of warp yarns (ends) and filling yarns (picks) per unit distance as counted while the fabric is held under zero tension, and is free of folds and wrinkles. **[D13.60] D 3775**

count, *n—in knitted fabrics*, the number (counted units) of wale loops and course loops per 25 mm (1 in.). **[D13.59] D 3787**

course, *n—in knitted fabrics*, a row of successive loops in the width direction of the fabric. **[D13.59] D 2594**

cover, *n—in yarns*, the outside layer of fibers that form the surface of a yarn. **[D13.58] D 2255**

covered yarn, *n*—a compound structure which contains distinguishable inner and outer fibrous elements which can be different. **[D13.58] D 204**

crack mark, *n*—an open place causing a streak of variable length approximately parallel to the length or width. **[D13.59] D 3990**

crack mark, *n—in bonded, fused, or laminated fabrics*, a sharp break or crease in the surface contour of either the face fabric or the backing fabric that becomes evident when the bonded, fused, or laminated composite is rolled, bent, draped, or folded. **[D13.54] D 2724, D 3135**

craftsman, *n*—an artisan who is skilled in creating new cultural objects. **[D13.53] D 5038**

crash towel, *n*—a plain weave nonterry product with hems or selvages which has a rough texture caused by uneven yarns. **[D13.63] D 5433**

CRE—abbreviation for constant-rate-of-extension. **[D13.58] D 1775**

crease, *n*—a fabric defect evidenced by a break, line, or mark in a fabric generally caused by a sharp fold. **[D13.59] D 3990**

crease mark, *n*—a visible deformation left in a fabric after a crease has been incompletely removed during fabric processing. **[D13.59] D 3990**

crease retention, *n*—that property of a fabric which enables it to maintain an inserted crease. **[D13.59] D 4850**

crimp, *n—as applied to a continuous-element zipper*, the predetermined formation of the monofilament cross-section at the point where the continuous element is interlocked. **[D13.54] D 2050**

crimp, *n—in a textile strand*, the undulations, waviness, or succession of bend, curls, or waves in the strand induced either naturally, mechanically, or chemically.

DISCUSSION—Crimp has many characteristics, among which are its amplitude, frequency, index, and type. In test method D 3937, crimp is characterized by a change in the directional rotation of a line tangent to

the fiber as the point of tangent progresses along the fiber. Two changes in rotation constitutes one unit of crimp. **[D 13.58] D 3937**

crimp contraction, *n*—an indicator of crimp capacity or a characterization of a yarn's ability to contract under tension. **[D13.58] D 4031**

crimp development medium, *n—for testing of textured yarn*, an environment that allows the temporary set of fiber crimp to be overcome and that allows the filaments to assume their permanently set configuration. **[D13.58] D 4031**

crimp frequency, *n—in manufactured staple fibers*, the number of crimps or waves per unit length of extended or straightened fiber. **[D13.58] D 3937**

crimp index, *n*—an indirect measure of the amplitude of the crimp. **[D13.58] D 3937**

crimp recovery, *n*—a measure of the ability of a yarn to return to its original crimped state after being subjected to tension. **[D13.58] D 4031**

critical defect, *n*—a serious defect that judgment and experience indicate is likely to prevent the usability or proper performance of a product from its intended purpose. **[D13.59] D 5430**

critical difference, *n*—the observed difference between two test results, which should be considered significant at the specified probability level. **[D13.93] D 2906**

CRL—abbreviation for constant-rate-of-loading. **[D13.58] D 0076, D 1775**

crocking, *n*—a transfer of color from the surface of a colored fabric to an adjacent area of the same fabric or to another surface principally by rubbing action. (Compare **color staining, color bleeding**.) **[D13.59] D 3990**

cross-chest width, *n—in body measurements*, the distance from front break-point to front break-point. **[D13.55] D 5219**

cross-dye effect, *n*—variation in dye pick-up between yarns or fibers, resulting from their inherent dye affinities. **[D13.59] D 3990**

cross-machine direction, CD, *n*—the direction in the plane of the fabric perpendicular to the direction of manufacture. **[D13.64] D 5732**

crotch, *n—in anatomy*, the body area adjacent to the vertex of the included angle between the legs. **[D13.55] D 5219**

crowfoot weave, *n*—a broken-twill weave 1-up and 3-down or 3-up and 1-down with two ends to the right and two ends to the left, commonly referred to as four-harness satin or broken crow. **[D13.18] D 579, D 4029**

crown, *n—in anatomy*, the top of the head. **[D13.55] D 5219**

crowsfeet, *n—in fabrics*, fine wrinkles of varying degree of intensity, size, and shape. **[D13.59] D 3990**

crush, *n—in pile yarn floor coverings*, loss of tuft definition due to entaglement and compression of pile fibers. **[D13.21] D 5684, D 6119**

crushed feathers, *n*—feathers and feather fiber resulting from curling, crushing, or chopping feathers without removing the quill. **[D13.61] D 4523**

cultural object, *n*—any man-made or modified natural article that reflects the beliefs, social forms, and material traits of racial, social, religious, or other specific groups. **[D13.53] D 5038**

curing, *n*—see the preferred term **vulcanization**.

curled selvage, *n*—self-descriptive. **[D13.59] D 3990**

cushion, *n—for inflatable restraints*, the inflatable fabric envelope portion of a module. **[D13.20] D 5426, D 5428, D 5645**

cut, *n—in asbestos and glass yarns*, the number of 100-yd lengths of yarn per pound; an indirect yarn numbering system. **[D13.58] D 1059, D 2260**

cut, *n—in wool yarns*, the number of 300-yd lengths of yarn per pound; an indirect yarn numbering system. **[D13.58] D 1059, D 2260**

cut, *n—as applied to woven fabric*, a length approximately 60 yard in the greige. **[D13.59] D 4850**

cut-off, *n—in zippers*, the measurement of a separate element from the head side to the pocket side of the legs. **[D13.54] D 2050**

cut pile floor covering, *n*—a pile floor covering in which the pile is composed of adjacent tuft elements that are separated or cut. **[D13.21] D 1335, D 5684**

cut selvage, *n*—cuts or breaks that occur in the selvage only. **[D13.59] D 3990**

cut strip test, *n—in fabric testing*, a strip test in which the specimen is cut to the specified testing width. **[D13.60] D 5035**

cuticle, *n—in mammalian hair fibers*, the layers of flattened cells enclosing the cortex, which forms an envelope of overlapping scales surrounding the fiber. **[D13.13] D 4510**

cycle length, *n—in braided rope*, the distance, parallel to the rope axis, of the strand to make one revolution around the rope. **[D13.16] D 4268**

cylindrical wet-scrub extraction, *n*—a carpet cleaning method in which (1) a cleaning agent is sprayed onto the carpet, and (2) soil and cleaning agents are removed by a machine which feeds water into two counter-rotating brushes. **[D13.62] D 5253**

damaged feathers, *n*—feathers that have been broken, damaged by insects, by mildew or rot, or otherwise materially injured. **[D13.61] D 4523**

dangerously flammable textile, *n*—not defined. This term is implied in the Standard For The Flammability Of Clothing Textiles (16 CFR Part 1610) under the Flammable Fabrics Act (15 USC 1191 et seq.) from which a meaning can be inferred. (See also **flammable textile.**) **[D13.92] D 4391**

dead cotton, *n*—a small nep of cotton fibers which is gathered on the surgface of the fabric and which is different in color from the surrounding fabric **[D13.59] D 3990**

decating mark, *n*—a crease mark or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam. **[D13.59] D 3990**

defect, *n—specific for inflatable restraints*, an imperfection in a cut piece of fabric that judgment and experience indicate is likely to result in either the hazardous or improper deployment of the inflatable restraint module in which the imperfection is incorporated. **[D13.20] D 5426**

defect, in inspection and grading, *n*—the departure or nonconformance of some characteristic from its intended level or state.

DISCUSSION—In inspection and grading the characteristic is a visual one. **[D13.59] D 5430**

deformation, *n*—a change in shape of a material caused by forces of compression, shear, tension, or torsion. **[D13.57] D 4848**

decorticating, *n—in flax*, the process of mechanically separating fiber bundles from straw. **[D13.17]**

degrees of freedom, *n—for a set*, the number of values that can be assigned arbitrarily and still get the same value for each of one or more statistics calculated from the set of data. **[D13.93] D 4853, D 4854, D 4855**

delamination strength, *n*—the tensile force required to separate the component layers under specified force. **[D13.21] D 3936, D 5684**

delayed deformation, *n*—deformation which is time-dependent and exhibited by material subject to a continuing force. **[D13.58] D 4848**

delicate or gentle cycle, *n*—a cycle in which agitation is slow and time is reduced. **[D13.63] D 3993**

delicate pretreatment procedure, *n—in textile conservation*, the washing, rinsing, drying, and pressing actions followed when fabrics are of certain yarn and fabric constructions or fiber contents, such as lightweight or sheer fabrics, fine yarns, silks, or wools. (Compare **sturdy pretreatment procedure**.) **[D13.53] D 5429**

denier, *n*—the unit of linear density, equal to the mass in grams of 9000 m of fiber, yarn, or other textile strand that is used in a direct yarn numbering system. (See also **linear density**) **[D13.58] D 1059, D 2260**

denim, *n*—a durable woven twill fabric, usually of all cotton or a blend of cotton and manufactured fibers, made from a variety of yarn numbers, and in various fabric weights, colors, designs, and finishes. **[D13.59] D 4850**

density, *n*—mass per unit volume. **[D13.51] D 276**

dents per unit width, *n—for woven pile yarn floor covering*, the number of binding sites per unit width; dents being the reed spaces through which the warp yarns pass in the loom or the metal strips, in the reed that form these spaces. **[D13.21] D 418**

deployment, *n—for inflatable restraints*, the sequence of events related to the activation of a module. **[D13.20] D 5428**

de-seeding, *n—in flax*, the process of removing seeds and seed-holding structures from plants. **[D13.17]**

desorption, *n*—a process in which a sorbed material is released from another material, as the desorption of moisture from fibers; the reverse of absorption, adsorption, or both. **[D13.51] D 4920**

detergent, *n—in textile product care*, a cleaning agent containing one or more surfactants as the active ingredient(s). **[D13.62] D 3136**

determination value, *n*—the numerical quantity calculated by means of the test method equation from the measurement values obtained as directed in a test method. (See also **observation**.) **[D13.93] D 2905, D 4271, D 4854**

dew point, *n*—the temperature below which condensation of water vapor begins to take place when the atmosphere is cooled. **[D13.51] D 2654, D 4920**

diamond, *n—in zippers*, the wedge-shaped portion of a slider between the throats. **[D13.54] D 2050**

differential dyeing behavior, *n—of cotton*, the tendency of cotton fibers to absorb and retain selectively varying proportions of different dyes from a binary dye bath. **[D13.11] D 1464**

differential shrinkage, *n—in zippers*, the difference in longitudinal dimensional change between the zipper tape and the fabric to which the zipper is attached. **[D13.54] D 3692**

dimensional change, *n*—a generic term for changes in length or width of a specimen subjected to specified conditions.

DISCUSSION—Dimensional change is usually expressed as a percent of the original dimension of the specimen. When a dimension increases it is often referred to as growth. When a dimension decreases it is often referred to as shrinkage. **[D13.59] D 1117, D 2646**

dimensional change, *n—in pressing and finishing of garments*, the change in dimensions of a fabric caused by pressing and finishing during garment manufacture. **[D13.56] D 3562, D 3779, D 3781, D 3782, D 3995, D 4119, D 4154**

dimensional change in boiling water (felt), *n*—the change in length and width with any associated change in thickness produced by immersion in boiling water under specified conditions. **[D13.13] D 461**

dimensional stability, *n*—the ability of a material to retain its length and width dimensions under specified conditions.

DISCUSSION—The dimensions are length and width and the specified conditions are those of cycled humidity and temperature. **[D13.59] D 6207**

dip, *n*—a chemical composition that is applied to a textile cord or fabric to improve its adhesion to rubber or other elastomer. **[D13.19] D 885, D 2910**

dip pick-up, *n—in glass cords*, the amount of dip solids present as supplied. **[D13.19] D 2970**

dip pick-up, *n—in a textile cord or fabric*, the amount of dip or dip components present after processing, including drying, as determined by prescribed methods, and expressed as a percentage of the mass of the oven-dried dip-free material. **[D13.19] D 885**

direct yarn numbering system, *n*—a system that expresses the linear density of yarn in mass per unit length.

DISCUSSION—The preferred units of measurements for the direct yarn measuring system are grams and meters. Tex (weight in grams for 1000 metres) and Denier (weight in grams for 9000 metres) are recommended to show linear density in the direct numbering system. These can be calculated by dividing the mass of a yarn by its length. Conversion factors to convert between direct and indirect numbering systems can be found in Standard Tables D2260. **[D13.58] D 1059, D 1907, D 2260**

direction of lay, *n*—the helical disposition of the components of a strand or cord **[D13.19] D 2969**

direction of slippage, *n*— at the seam line of movement parallel to either the filling or the warp on a woven fabric in

which minimum force is required to produce yarn slippage.

DISCUSSION—The fabric may be pulled in both directions in many cases. **[D13.59] D 4034**

direction of twist, *n*—the right or left direction of the helix formed in a twisted strand as indicated by superimposition of the capital letter "S" or "Z." **[D13.58] D 1422, D 1423**

discrete sample, *n*—one or more units taken from a material that consists of separately identifiable units. (Compare to **bulk sample.**) **[D13.93] D 4271**

discrete variate, *n*—a variate that is a measurement based on a scale that has a limited or finite number of steps; such as a count, a rating scale, or a ratio of successes to total observations. **[D13.93] D 4271**

distortion, *n*—*in fabrics*, a general term for a visible defect in the texture of a fabric.

DISCUSSION—For the purpose of test methods D 3939 and D 5362, Snags are composed of different combinations of protrusions and distortions. A distortion is characterized by a group of fibers, yarn, or a yarn segment that is displaced from its normal pattern so that there is a visible change in the texture of the fabric; however, the displaced group of fibers, yarn, or yarn segment does not extend **above** the fabric surface. Distortions include conditions where (1) tension on a snagged yarn has changed the size of some loops within a knitted fabric and the result is a pucker on the surface of the fabric, and (2) tension on a snagged yarn has caused a yarn to break off within a woven fabric and the result is a change in the texture where the yarn used to be. **[D13.59] D 3939, D 5362**

distortion, *n*—*in textile battings*, defects such as holes, lumps, or thin areas caused by movement of fibers. **[D13.61] D 4770**

doctor streak, *n*—*in printed cloth*, a wavy white or colored streak in the warp direction of printed cloth caused by a defective doctor blade. **[D13.59] D 3990**

documentary characteristic, *n*—any historic, stylistic, iconographic, technological, intellectual, aesthetic, or religious data pertaining to an object under consideration for conservation. **[D13.53] D 5038**

documentation, *n*—the record of information (historic, stylistic, iconographic, technological, intellectual, aesthetic, scientific, or spiritual) about any object of cultural or natural heritage. **[D13.53] D 5038**

doffing tube, *n*—a component of an open-end spinning machine, which is an extension to the navel and is used to guide the withdrawn yarn en route to the take-up rollers. (See also **navel**) **[D13.58] D 3888**

double bow, *n*—two fabric bows, arcing in the same direction, as in a flattened *M* or *W* depending on the viewing angle. (Compare **double reverse bow and double bow)**

DISCUSSION—In tubular knits, there may be defferentail bowing between the top and the bottom of the tube. **[D13.60] D 3882, D 3990**

double braid, *n*—*in rope*, a braided construction consisting of two hollow braided ropes, one inside the other. **[D13.16] D 4268**

double hooked bow, *n*—one hooked bow at each side of the fabric that are in opposite directions. (See also **hooked bow**) **[D13.60] D 3882, D 3990**

double pick, *n*—*in woven fabrics*, two picks wrongly placed in the same shed. (See also **mispick.** Compare **jerk-in**.) **[D13.59] D 3990**

double reverse bow, *n*—two fabric bows arcing in opposite directions. (See also **bow**. Compare **double bow**.) **[D13.60] D 3882**

double-stitched seam-finish, *n*—a finish for the raw edges of a plain seam, in which another row of machine stitching is made through both seam allowances placed together. **[D13.53] D 4965**

double-stroke, *n*—***in flex and abrasion testing,*** an abrasion cycle that forward and one backward motion. **[D13.60] D 3885**

double welt seam, *n*—a complex seam formed on the inside of the object, with one trimmed raw seam edge enclosed and two rows of stitching visible on the face side. (Compare **welt seam**.) **[D13.53] D 4965**

down, *n*—the fine, soft plumage of waterfowl, consisting of light, fluffy filaments having at least two barbs attached; that is, barbs growing from the quill point but without a quill shaft. **[D13.61] D 4523**

down fibers, *n*—detached barbs from down; plumules and detached barbs from the basal end of waterfowl feather quill shafts that are indistinguishable from the barbs of down. **[D13.61] D 4523**

down, nestling, *n*—a down not fully developed with a sheath and with soft barbs emanating from the sheath. **[D13.61] D 4523**

draw-back, *n*—a weave distortion characterized by tight and slack places in the same warp yarn. **[D13.59] D 3990**

draw ratio (DR), *n*—the relation of the final length per unit mass to original length per unit mass of a material resulting from drawing. **[D13.58] D 3218, D 5344**

draw texturing, *n*—*for processing thermoplastic fibers*, the simultaneous or sequential process of drawing and imparting crimp, thus producing increased molecular orientation and increased bulk. **[D13.58] D 5344**

drawing, *n*—*in textile processing*, the process of stretching or attenuating a material to increase the length per unit mass. **[D13.58] D 3218, D 5344**

dress career apparel, *n*—career apparel which is not generally subject to abusive wear and for which appearance is a more important attribute than durability. (See also **career apparel, vocational career apparel**) **[D13.56] D 3995, D 4232**

dress glove, *n*—a covering for the hand, often extending part way up the arm, worn primarily for formal or dress occasions. **[D13.56] D 4115**

dress shirt, *n*—*for boys*, a shirt made with a specific collar size or numerical size and designed to be worn with a tie and jacket. **[D13.56] D 3477, D 4231**

dress shirt, *n*—*for men*, a shirt made with a specific collar size and sleeve length where appropriate, and designed to be worn with a tie and jacket. **[D13.56] D 3477, D 4231**

drop, *n*—*in body measurements*, the difference between the chest girth and the waist girth. **[D13.55] D 5219**

drop, *n*—that part of a bedcovering that hangs perpendicular to the floor. **[D13.63] D 4721**

dropped stitch, *n*—*in knitted fabrics*, an unknitted stitch.

[D13.59] D 3990

dry extraction cleaning, *n*—a method in which an absorbent compound is dispersed over the surface of a textile product by hand or machine, thoroughly brushed through the pile, allowed to dry, and removed by suction. **[D13.62] D 5253**

dry foam extraction cleaning, *n*—a process by which a highly aerated, low moisture content shampoo is brushed through the textile floor covering pile or applied to the surface of upholstery. **[D13.62] D 5253**

dry solvent, *n*—any organic solvent used to dissolve another material. (See **solvent**). **[D13.62] D 5253**

drycleanable button, *n*—a button that can be solvent-cleaned without damage such as dissolving or loss of finish. (See dry-cleaning, finish). **[D13.54] D 5497**

drycleaning, *n—in the care of textiles*, the cleaning of consumer textiel products with organic solvents such as petroleum solvent or perchloroethylene. **[D13.62] D 3136, D 3938**

duck, *n*—a compact, firm, heavy, plain-weave cotton fabric, mass per square yard 6 to 50 oz. (See also **flat duck**, and **plied yarn duck**) **[D13.59] D 4850**

duplicate, *n—in experimenting or testing*, one of two or more runs with the same specified experimental or test conditions but with each experimental or test condition not being established independently of all previous runs. (Compare **replicate.**) **[D13.93] D 4853**

duplicate, *vt—in experimenting or testing*, to repeat a run so as to produce a duplicate. (Compare **replicate.)** **[D13.93] D 4853**

durable-press, *adj*—having the ability to retain substantially the initial shape, flat seams, pressed-in creases, and unwrinkled appearance during use and after laundering or drycleaning. (See **wash and wear**.)

DISCUSSION—The use of the term **permanent-press,** adj, as a substitute for **durable-press** is not recommended. **[D13.59] D 4850**

dust ruffle, *n*—a fabric which (*1*) lies flat over the box spring under the mattress on a bed, and (*2*) has a pleated, tucked, or gather drop to the floor. **[D13.63] D 4721**

dye streak, *n*—an unintended stripe in a fabric due to uneven absorption of a colorant. **[D13.59] D 3990**

dyestain, *n*—an area of discoloration due to uneven absorption of a colorant. **[D13.59] D 3990**

edge-stitched seam-finish, *n*—a finish for the raw edges of a plain seam, in which machine stitching is placed close to the raw edge of each seam allowance. (Compare **zigzagged seam-finish**.) **[D13.53] D 4965**

effective carriage mass, *n—in CRL-type tensile testing machine*, the force actually applied to a specimen by the mass of the carriage, plus any added masses. **[D13.58] D 76, D 1775**

effective fiber length, *n—in vibroscope test for linear density*, that portion of the fiber free to vibrate between fixed supports or holders. **[D13.58] D 1577**

effective gage length, *n—in tensile testing*, the estimated length of the specimen subjected to a strain equal to that observed for the true gage length. **[D13.58] D 76, D 4849**

effective insulation ratio, *n—in thermal transmittance of textile only*, the increase in insulation afforded by the fabric in comparison to the uncovered test plate under specified conditions of test. **[D13.51] D 1518**

eight-harness satin, *n*—a warp-faced or filling-faced weave illustrating that the entire face of the fabric surface is covered with warp or filling yarn, respectively. **[D13.18] D 579, D 4029**

elastic fabric, *n*—a fabric made from an elastomer either alone or in combination with other textiles. (See also **elastomeric yarn**.)

DISCUSSION—At room temperature an elastic fabric will stretch under tension and will return quickly and forcibly to substantially its original dimensions and shape when tension is removed.

Elastic fabrics may be manufactured by weaving, braiding, knitting, or other processes. **[D13.59] D 1775, D 4850, D 4964, [D13.58] D 4850**

elastic limit, *n*—the greatest stress that can be applied to a material without permanent deformation (Compare **yield point**) **[D13.58] D 4848**

elastic tape, *n*—a tape containing rubber or other elastomers to permit rubber-like stretch in at least one direction. **[D13.59] D 4850**

elastic webbing, *n*—a webbing containing rubber or other elastomers to permit rubber-like stretch in at least one direction. **[D13.59] D 4850**

elasticity, *n*—that property of a material by virtue of which it tends to recover its original size and shape immediately after removal of the force causing deformation. **[D13.58] D 4848**

elastomeric yarn, *n*—a nontextured yarn which can be stretched repeatedly at room temperature to at least twice its original length and which after removal of the tensile force will immediately and forcibly return to approximately its original length. **[D13.58]**

elbow, *n—in anatomy*, the joint which articulates between the upper arm and the lower arm. **[D13.55] D 5219**

elbow girth, *n—in body measurements*, with the arm bent at 90° and the clenched fist placed on the hip, the circumference of the elbow. **[D13.55] D 5219**

electroplated button, *n*—plastic buttons which have been made conductive by chemical treatment followed by the electroplating of metallic coatings. **[D13.54] D 5497**

electrostatic decay half-life, *n—in textiles*, the time in minutes for the maximum voltage induced on the textile to be reduced to one half of the maximum voltage by the various decay mechanisms: conduction and ionization of the air. **[D13.58] D 4238**

electrostatic propensity, *n*—the capacity of a nonconducting material to acquire and hold an electrical charge by induction (by means of corona discharge) or by triboelectric means (rubbing with another material). **[D13.58] D 4238**

element, *n—in zippers*, a device designed for interlocking, capable of being affixed along the edge of a tape. (Compare **continuous element**.) **[D13.54] D 2050**

elevator, *n*—a general term describing a mechanical device on

the Motion Control, Inc. Fiber Information System which moves the specimen clamp while preparing the specimen or while taking a length/uniformity index or strength/elongation measurement. **[D13.11] D 4604**

elongation, *n*—the ratio of the change in length of a rope during application of tension to the original length of the rope when new. **[D13.16] D 4268**

elongation, *n*—the ratio of the extension of a material to the length of the material prior to stretching, expressed as a percent. (Compare **extension.**) **[D13.58] D 204, D 1774, D 2101, D 2256, D 3822, D 4604, D 4848, D 5035**

elongation at break, *n*—the elongation corresponding to the breaking force. (Compare **elongation at rupture.** See also **elongation.**) **[D13.58] D 2101, D 2256, D 3822, D 4848**

elongation at breaking load, *n—in fiber strength testing of cotton*, the elongation corresponding to the maximum load, and expressed as a percentage of the ⅛-in. (3.2-mm) gage length. **[D13.11] D 1445, D 4604**

elongation at rupture, *n*—the elongation corresponding to the force-at-rupture. (Compare **elongation at break.**) **[D13.58] D 2256, D 4848**

elongation at specified force, (EASF), *n*—the elongation associated with a specified force on the force-extension curve. **[D13.58] D 3822, D 4848**

embrittlement, *n*—the formation of a brittle residue as the result of pyrolysis or incomplete combustion. **[D13.92] D 4391**

end, *n*—an individual sliver, roving, yarn, or cord. **[D13.58] D 2258**

end, *n—in fabric*, an individual warp yarn (single or ply) or cord.

DISCUSSION—The term is sometimes used to indicate a short length or remnant of fabric. **[D13.59] D 4850**

end out, *n*—a void caused by a missing warp yarn. **[D13.59] D 3990**

end-use, *n—in wear testing*, the use for which a textile is intended. **[D13.53] D 3181**

entanglement, *n*—the extent or degree to which the filaments in a yarn are interlocked and cannot be readily separated. **[D13.58] D 4724**

environmental conditions, *n—in textile testing*, the atmosphere in which specified moisture levels, temperature ranges, and concentrations of gases are controlled. **[D13.20] D 5427**

epidermis, *n—in mammalian hair fibers*, the outside or surface layer of the fiber consisting of flat, irregular, horny cells or scales. **[D13.13] D 4845**

error of the first kind, α, *n—in a statistical test*, the rejection of a statistical hypothesis when it is true. **[D13.93] D 4853, D 4855**

error of the second kind, β, *n—in a statistical test*, the acceptance of a statistical hypothesis when it is false. **[D13.93] D 4853, D 4855**

evaluation period, *n*—the perod of time an item is used before being evaluated on the specific performance properties. **[D13.53] D 3181**

evaluator, *n*—a part of, or an attachment to, an unevenness testing instrument, which automatically gives an estimate of R_u. **[D13.58] D 1425**

examination, *n*—analysis of (1) the materials, structure, embellishments, and condition of a cultural object, and (2) the impact of these factors along with documentary characteristics on the treatment, display, and storage of the object. **[D13.53] D 5038**

experimental error, *n*—variability attributable only to a test method itself. **[D13.93] D 4853**

exposed tape width, *n—in zippers*, the part of the tape extending beyond the shoulders of the interlocking elements to the outer tape edge. **[D13.54] D 2050**

extensibility, *n*—that property by virtue of which a material can undergo extension or elongation following the application of sufficient force. (See also **Annex A3**.) **[D13.57] D 4848, D 4850**

extension, *n*—the change in length of a material due to stretching. (Compare **elongation.**) **[D13.60] D 2259, D 2646, D 4848, D 5035, D 5344**

extension force, *n*—the force required to stretch a material to a given length. **[D13.58] D 5344**

extension-recovery chart, *n—in elastic materials testing*, a continuously plotted graph of tension versus extension resulting from an extension-recovery cycle. (Compare **tension-recovery chart.** See also **extension-recovery cycle** and **tension-recovery cycle**.) **[D13.58]**

extension-recovery cycle, *n—in tension testing*, the continuous extension of a specimen, with a momentary hold at a specified extension, followed by a controlled rate of return to zero extension. (Compare **tension-recovery cycle**. See also **extension-recovery chart** and **tension-recovery chart**.) **[D13.58]**

extractable matter, *n*—nonfibrous material in or on a textile, not including water, which is removable by a specified solvent or solvents, as directed in a specified procedure. **[D13.13] D 461, D 541, D 681, D 1574, D 2257, D 2646, D 5684**

extraction cleaning, *n*—a general term for a number of refurbishing methods in which the cleaning agent is delivered onto the textile product, agitated, and simultaneously removed by suction. **[D13.62] D 5253**

fabric, *n—in textiles*, a planar structure consisting of yarns or fibers. **[D13.60] D 737, D 1388, D 1424, D 4850, D 5587**

fabric dip, *n—for tire fabrics*, a chemical composition which is applied to a textile cord or fabric to improve its adhesion to rubber compounds. **[D13.19] D 4393**

fabric growth, *n*—the increase in the original length of a specimen after the application of a specified force for a prescribed time and the subsequent removal of the tension

DISCUSSION—Fabric growth is usually expressed as a percentage of the length of the specimen prior to application of the tension. See also **permanent deformation**. **[D13.59] D 2594, D 3107**

fabric package, *n*—a length of fabric in a form suitable for handling, storing, or shipping.

DISCUSSION—Fabric packages may be unsupported, such as when folded in cases, or supported, such as on tubes, bolts, or creels. Fabric

packages are frequently referred to as rolls or pieces. **[D13.58] D 2258**

fabric roof-system, *n*—a system of coated fabric or laminated fabric along with support cables, edge ropes, clamps, neoprene, roof drains, arch wear strips, and anchor bolts that constitutes the outside top covering of a building. **[D13.59] D 4851**

fabric stability, *n—in vinyl-coated glass screening and louver cloth*, the property denoting the ability to resist slippage of yarn segments in one direction over yarn segments in the opposite direction. **[D13.18] D 3656, D 4028, D 4912**

fabric stretch, *n*—the increase in length of a specimen of fabric resulting from a force applied under specified conditions.

DISCUSSION—The difference is usually expressed as a percentage of the initial length of the fabric specimen. Fabric stretch differs from fabric elongation in that the latter (up to the point of rupture) reflects the instantaneously existing amount of stretch under a constantly increasing tension force. **[D13.59] D 2594, D 3107**

fabricate, *v—in buttons*, the conversion of a blank into a complete button. **[D13.54] D 5497**

face, *n—in buttons*, that portion which will be exposed after attaching to the substrate. **[D13.54] D 5171, D 5497**

face side, *n—in textile materials*, the side of the material that is outward in the completed object. (Ant. **back side**.) **[D13.53] D 4965**

factor, *n—in experimenting*, a condition or circumstance that is being investigated to determine if it has an effect upon the result of testing the property of interest. **[D13.93] D 4853**

failure, *n*—an arbitrary point beyond which a material ceases to be functionally capable of its intended use. (Compare **rupture.**) **[D13.58] D 4848**

failure, *n—in sewn fabric seams*, fabric or sewing thread rupture or seam (yarn) slippage. **[D13.54] D 1683, D 3940**

fatiguing force, *n—in testing sewn seams*, the force that is repeatedly applied to a test specimen. **[D13.59] D 4033**

feather fiber, *n*—detached barbs of feathers which are not joined or attached to each other. **[D13.61] D 4523**

feathers, *n*—the outgrowth forming the contour and external covering of fowl. **[D13.61] D 4523**

feathers, crushed, *n*—feathers and feather fiber resulting from curling, crushing, or chopping feathers without removing the quill. **[D13.61] D 4523**

feathers, damaged, *n*—feathers that have been broken, damaged by insects, by mildew or rot, or otherwise materially injured. **[D13.61] D 4523**

feathers, landfowl, *n*— See **feathers, nonwaterfowl.**

feathers, nestling, *n*—immature feathers in which the barbs are held together and covered by a sheath. **[D13.61] D 4523**

feathers, nonwaterfowl, *n*—feathers derived from chickens, turkeys, or other landfowl. (Syn. *feathers, landfowl*) **[D13.61] D 4523**

feathers, quill, *n*—feathers which are over 100 mm (4 in.) in length or which have a quill point exceeding 9.5 mm (6/16 in.) in length. **[D13.61] D 4523**

feathers, waterfowl, *n*—feathers from ducks or geese, or both. **[D13.61] D 4523**

feed unit, *n—in an open-end spinning machine*, the device which presents the feed stock to the opening roller by either a feed roller and feed plate combination or interacting feed rollers. (See also **opening device.**) **[D13.58] D 3888**

felt, *n*—a textile (fabric) characterized by the densely matted condition of most or all of the fibers of which it is composed. **[D13.13] D 4845**

felt, *n*—a textile structure characterized by interlocking and consolidation of its constituent fibers achieved by the interaction of a suitable combination of mechanical energy, chemical action, moisture, and heat but without the use of weaving, knitting, stitching, thermal bonding, or adhesives. **[D13.13] D 2475**

fiber, *n—in textiles*, a generic term for any one of the various types of matter that form the basic elements of a textile and that is characterized by having a length at least 100 times its diameter. (See also **manufactured fiber, natural fiber,** and Annex A1 and Annex A2.) **[D13.92] D 123**

fiber beard, *n—in length testing of fibers*, fibers caught randomly on a comb which are subsequently straightened and parallelized without stretching or damaging. **[D13.58] D 3513**

fiber birefringence, *n*—the algebraic difference of the index of refraction of the fiber for plane polarized light vibrating parallel to the longitudinal axis of the fiber and the index of refraction for light vibrating perpendicular to the long axis. (See also **birefringence**.) **[D13.51] D 276**

fiber bundle, *n*—group of ultimate fibers which are held together in the flax stem by pectins, lignins or any combination thereof. **[D13.17]**

fiber channel, *n*—a component of an open-end spinning machine through which the fibers are conveyed by an air current from the opening device to the rotor. (See also **opening device.**) **[D13.58] D 3888**

fiber chip, *n—in manufactured textiles*, staple fibers that are massed together as a unit and that maintain a single geometry or alignment textiles. **[D13.58] D 3937**

fiber cohesion, *n—in textiles* the resistance to separation of fibers in contact with one another. **[D13.58] D 2612, D 4120**

fiber density, *n*—mass per unit volume of the solid matter of which a fiber is composed, measured under specified conditions. **[D13.51] D 276**

fiber rope, *n*—a rope produced primarily from textile fibers. **[D13.16] D 4268**

fiberfill, *n*—manufactured fibers especially engineered as to linear density, cut length, and crimp for use as a textile filling material. **[D13.61] D 4770**

Fiberweigh, *n*—an instrument having a capacity for weighing a 51-grain (3.30-g) specimen with a sensitivity of at least 0.2 % of the mass being weighed. **[D13.11] D 4604**

fibrogram, *n—in testing cotton fibers for length*, the curve representing the second cumulation of the length distribution of the fibers sensed by the length measuring instrument in scanning the fiber board. **[D13.11] D 1447, D 4604**

Fibronaire, *n*—an instrument which determines the micronaire reading of raw cotton fibers using the "porous-plug" air flow technique. **[D13.11] D 4604**

fid, *n*—a wooden or hard plastic tool used as an aid in rope splicing. **[D13.16] D 4268**

filament, *n—in textiles*, a continuous fiber of extremely long length. **[D13.92] D 123**

filament, *n—in steel cord*, the individual element in a steel strand or cord. **[D13.19] D 2969**

filament yarn, *n*—a yarn composed of (continuous) filaments assembled with or without twist. **[D13.58] D 2101, D 4724**

fill leakage, *n—in comforters*, either partial or total penetration of the stuffing material through the outer or face fabric. **[D13.63] D 4769**

filler, *n*—nonfibrous material, such as insoluble clays or gypsum, together with starches, gums, etc., added to a fabric to increase its weight or to modify the appearance or handle of the fabric. (*Syn.* back-sizing.) **[D13.59] D 4850**

filling, *n*—yarn running from selvage to selvage at right angles to the warp in a woven fabric.

DISCUSSION—Filling yarn is also designated as "weft" and occasionally as "woof." In the United Kingdom the word "filling" corresponds to the word "filler" in the United States. **[D13.59] D 3775**

filling band, *n—in woven fabrics*, a visual defect across the width due to a change occurring in the yarn for a large number of picks. (Compare **filling bar**) **[D13.59] D 3990**

filling bar, *n—in woven fabrics*, a visual defect across the width which contains a limited number of picks of different appearance than normal. (Compare **filling band**) **[D13.59, D13.20] D 3990, D 5426**

filling elongation and tension, *n*—stretch or tension measured at right angles to the warp direction of the fabric. **[D13.58]**

filling-faced twill, *n*—a weave in which filling yarns float over warp yarns, to produce a diagonal effect in the resulting fabric. (See also **twill weave** and **warp faced twill**.) **[D13.59] D 4850**

filling material, *n—for feathers or down*, the contents of an industry product containing feathers or down of any kind or type, with or without natural or synthetic materials. **[D13.61] D 4523**

filling tests, *n—in fabric testing*, tests in which the filling yarns are torn. **[D13.60] D 1424**

filling-to-filling seam, *n*—a sewn seam in which the yarns in the filling direction on both sides of the sewn seam are perpendicular to the seam. **[D13.59] D 4033**

final twist, *n*—the number of turns per unit length in a single yarn component of a plied yarn or the plied yarn component of a cabled yarn as the component lies in the more complex structure. **[D13.58] D 1423**

fine end, *n*—a smaller than normal diameter warp end. (*Syn.* light end, thin end. (Compare **coarse end**.) **[D13.59] D 3990**

fineness, *n—of fibers*, a relative measure of size, diameter, linear density, or mass per unit length expressed in a variety of units. **[D13.13] D 1448, D 2252, D 3991, D 3992, D 4604**

finger mark, *n*—an irregular spot showing variation in picks per inch for a limited width. **[D13.59] D 3990**

fingertip towel, *n*—a textile product with fringes and side hems or selvages which is smaller than a hand towel, generally used as decoration and to dry hands. **[D13.63] D 5433**

finish, *n—in buttons*, the surface condition or texture. **[D13.54] D 5497**

finished, *adj—for glass laminates*, a descriptive term for woven fabrics that have passed through a treating procedure which is compatible with a resin matrix or facilitates manufacturing, or both. **[D13.18] D 4029, D 5426**

finished, *adj—in textile floor covering materials*, the completion of all manufacturing operations. **[D13.21] D 2859, D 5684**

finished fabric weight, *n*—mass per unit area expressed in grams per square metre (ounces per square yard), grams per linear metre (ounces per linear yard), or inversely as metres per kilogram (linear yards per pound), or square metres per kilogram (square yards per pound). **[D13.59] D 3887, D 3990**

finished pile yarn floor covering, *n—in textile floor covering materials*, the pile yarn floor covering that has undergone all steps of the manufacturing process. **[D13.21] D 2859, D 5684**

finished yield, *n—in knitted fabrics*, the number of finished square metres per kilogram (square yards per pound) of finished fabric. **[D13.59] D 3887, D 3990**

finishing bar, *n*—uneven appearance across the entire fabric width. **[D13.59] D 3990**

fire, *n—as related to textile flammability*, an uncontrolled conflagration in which materials are destroyed by burning as evidenced by flames of varying size and shape, and a high-intensity heat source of 5 kw or greater, such as burning contents of a room, a burning basket, burning building, or forest fire. **[D13.92] D 4391**

fire retardance, *n*—the resistance to combustion of a material when tested under specified conditions. **[D13.13] D 461**

fitted sheet, *n—in textiles*, a product usually made with boxed corners, sometimes elasticized with shape and size to conform to the contours of the mattress and used for covering the mattress on a bed. **[D13.63] D 4722, D 5431**

fixed retainer, *n—in zippers*, a device permanently attached to the retainer pin at the bottom of one stringer. **[D13.54] D 2050**

flagging, *n—in sewn seams*, a mode of failure evidenced by slippage of one or more yarns entirely out of the original seam. **[D13.59] D 4033**

flame, *n—as related to ignition of textiles*, a controlled hot, luminous zone of gas or matter in gaseous suspension, or both, of constant size and shape that is undergoing combustion as evidenced by a low-intensity heat flux of less than 1 kw such as candle flame or match flame. (Compare **fire**.) **[D13.92] D 4391**

flame application time, *n*—the time interval for which the ignition flame is applied to a material. **[D13.92] D 123**

flame resistance, *n*—the property of a material whereby flaming combustion is prevented, terminated, or inhibited

following application of a flaming or nonflaming source of ignition, with or without subsequent removal of the ignition source. **[D13.92] D 461, D 2859, D 4372, D 4391, D 5684**

flame resistant, *adj*—having flame resistance. **[D13.92] D 4372, D 4391**

flame retardant, *n*—a chemical used to impart flame resistance. **[D13.92] D 1230, D 2859, D 4391, D 5684**

flame-retardant-treated, *adj*—having received a flame-retardant treatment. **[D13.92] D 1230, D 4391**

flame-retardant treatment, *n*—a process for incorporating or adding flame retardant(s) to a material or product. **[D13.92] D 2859, D 4391, D 5684**

flame spread, *n*—the propagation of a flame away from the source of ignition. **[D13.92] D 1230, D 4391**

flame-spread time, *n*—the time taken by a flame on a burning material to travel a specified distance under specified conditions. **[D13.92] D 1230, D 4391**

flaming debris, *n*—material which continues to flame as it separates and moves away from the flaming source. **[D13.92] D 123**

flammability, *n*—those characteristics of a material that pertain to its relative ease of ignition and relative ability to sustain combustion. **[D13.92] D 1230, D 3659, D 4151, D 4391**

flammable textile, *n*—any combustible textile that burns with a flame. (See also **flammability.** Compare **combustible textile, noncombustible textile.**) **[D13.92] D 4391**

flange lock slider, *n—in zippers*, a slider with notches in the flanges of the slider that block the shoulders of the elements when the stringers are pulled apart, thus preventing further separation of the chain. **[D13.54] D 2050**

flanges, *n—in zippers*, the edges of the slider formed to contain the chain. **[D13.54] D 2050**

flannel, *n—as applied to bed sheeting*, a napped fabric used in the fabrication of sheeting products. **[D13.63] D 5431**

flare, *n*— the spreading of the filament ends or the strand ends at the cut end of a steel tire cord, expressed as the unravelled length. **[D13.19] D 2969**

flat duck, *n*—duck fabric having the warp of two single yarns woven as one and either single or plied filling yarn. (See also **duck**.) **[D13.59] D 4850**

flat-felled seam, *n*—a complex seam formed on the outside of an object with raw edges enclosed and two rows of machine stitching visible on the face side. **[D13.53] D 4965**

flat sheet, *n—in textiles*, a flat, hemmed product, usually rectangular, used for covering the mattress on a bed and used for sleeping on or under. **[D13.63] D 4722, D 5431**

flax, *n*—the generic name for plants that are botanically classified as *Linum usitatissimum*, which are cultivated for seed and/or fiber. **[D.13.17]**

fleece, *n*—the wool of one sheep as obtained by shearing. **[D13.13] D 1234**

flexibility, *n*—that property of a material to endure repeated flexing, bending, or bowing without rupture. (See also Annex A3.) **[D13.59] D 3885, D 4850**

flexural rigidity, *n*—

general—resistance to bending.

specific—the couple on either end of a strip of unit width bent into unit curvature in the absence of any tension. **[D13.60] D 1388**

float, *n—in woven fabric*, the portion of a warp or filling yarn that extends unbound over two or more filling or warp yarns. **[D13.59] D 4850**

float, *n*—a defect in which a warp or filling yarn extends unbound over the ends with which it should be interlaced. **[D13.59] D 3990**

flock, *n*—a material obtained by reducing textile fibers to fragments as by cutting, tearing, or grinding, to give various degrees of comminution. **[D13.56] D 3597**

flocked blanket, *n*—a blanket made with a fishnet-type scrim sandwiched between two thin layers of foam with flock adhered to the outside of the foam. **[D13.63] D 5432**

floor covering, *n—an essentially planar material*, having a relatively small thickness in comparison to its length or width, which is laid on a floor to enhance the beauty, comfort, and utility of the floor. **[D13.21] D 1335, D 2646, D 2859, D 3936, D 5251, D 5252, D 5417, D 5684, D 5793, D 5823, D 5848, D 6119, D 6283, D 6540**

flooring material, *n*—any pliable planar structure used as a base surface in camping tentage, but excluding such things as rugs or carpets placed in the tent that are not integral parts of the item. **[D13.52] D 4372**

flounce, *n*—a ruffled drop on a bedcovering. **[D13.63] D 4721**

foam, *n—in cleaning textiles*, a frothy mass of fine bubbles generated by whipping or agitating a shampoo. **[D13.62] D 5253**

foam cleaning, *n*—a process in which a prepared foam is applied to a textile product, scrubbed in, allowed to dry, and the encapsulated soil is removed by suction. **[D13.62] D 5253**

foam tear, *n*—a condition wherein the foam portion of a laminated fabric ruptures prior to the failure of the bond. **[D13.54] D 2724, D 3135**

foot length, *n—in body measurements*, with the subject standing barefoot, the distance from the most prominent part of the heel where it touched the floor to the end of the most prominent toe. **[D13.55] D 5219**

foot traffic units, *n—for pile floor covering*, the number of passes by human walkers over a specific group of carpet samples. **[D13.21] D 5684**

force, *n*—a physical influence exerted by one body on another which produces acceleration of bodies that are free to move and deformation of bodies that are not free to move. (Compare **strength.**) **[D13.58] D 1578, D 4848**

force-at-rupture, *n*—the force applied to a material immediately preceding rupture. (Compare **breaking force.** See also **rupture.**) **[D13.58] D 4848**

force-at-specified-elongation (FASE), *n*—the force associated with a specific elongation on the force-extension or force-elongation curve. **[D13.58] D 3822, D 4848**

force-deformation curve, *n*—a graphical representation of the force and deformation relationship of a material under

conditions of compression, shear, tension, or torsion. (Compare **force-elongation curve, force-extension curve,** and **stress-strain curve.**) **[D13.58] D 4848**

force-elongation curve, *n*—a graphical representation of the force and elongation relationship of a material under tension. (Compare **force-deformation curve, force-extension curve,** and **stress-strain curve.)** **[D13.58] D 4848**

force-extension curve, *n*—a graphical representation of the force and extension relationship of a material under tension. (Compare **force-deformation curve, force-elongation curve,** and **stress-strain curve.**) **[D13.58] D 4848**

force-recovery cycle, *n—in elastic fabric testing*, a continuous curve or plot of force versus elongation (with movement stopped momentarily at point of reversal) describing the elongation and recovery of an elastic fabric; also known as the loading and unloading cycle. **[D13.59] D 1775**

foreign matter, *n—in cotton*, non-lint material commonly referred to as waste or trash such as dust, sand, seed-coat fragments, leaves, and stems normally present in raw and partially processed cotton. **[D13.11] D 2812, D 5426**

frame yarn, *n*—pile yarn in a Wilton-type carpet. **[D13.21] D 418**

frayed, *adj—in textiles*, a worn condition characterized by damaged yarn surfaces, projecting yarn ends, hairiness, etc. **[D13.58] D 5647**

French seam, *n*—a complex seam formed on the inside of the object with both raw edges enclosed and no stitching rows visible on the face side. (Compare **mock French seam**.) **[D13.53] D 4965**

frequency distribution, *n—of a sample*, a table giving for each value of a discrete variate, or for each group of values of a continuous variate, the corresponding number of observations. **[D13.93] D 4686**

frequency distribution, *n—of a population*, a function that, for a specific type of distribution, gives for each value of a random discrete variate, or each group of values of a random continuous variate, the corresponding probability of occurrence. **[D13.93] D 4686**

friction, *n*—the resistance to the relative motion of one body sliding, rolling, or flowing over another body with which it is in contact. **[D13.58] D 3108, D 3412**

front break-point, *n—in anatomy*, the location on the front of the body where the arm separates from the body. **[D13.55] D 5219**

front high-hip, *n—in body measurements*, the distance from one imaginary side seam to the other imaginary side seam at the high-hip level. **[D13.55] D 5219**

frosting, *n*—a change in color in a limited area of a fabric caused by abrasive wear. **[D13.59] D 3990**

F-test, *n*—a test of statistical significance based on the use of George W. Snedecor's F-distribution and used to compare two sample variances or a sample variance and a hypothetical value. **[D13.93] D 4855**

fundamental resonant frequency, *n—in linear density testing*, the lowest frequency at which free oscillations can exist in a fiber tensioned between two fixed points. **[D13.58] D 1577, D 4848**

furniture covering, *n*—a general term for attached upholstery fabric, slipcovers and throws. **[D13.63] D 4852**

furniture unit, *n—in upholstered furniture*, a complete single piece of upholstered seating, such as a sofa, love seat, lounge chair, rocker, or recliner. **[D13.63] D 4852**

fused fabric, *n*—a type of bonded fabric made by adhering a fusible fabric to another fabric, such as for use in an interlining. **[D13.54] D 2724, D 3135**

fusible fabric, *n*—a utilitarian fabric which has a thermoplastic adhesive applied to one side, sometimes in a pattern of dots, so that the surface can be bonded to another fabric surface by the use of heat and pressure. **[D13.54] D 2724, D 3135**

fusion bonded, *n*—a method for creating a carpet pile construction by adhering loops or lengths of yarn to the face of a primary backing. **[D13.21] D 1335, D 5684**

fuzz, *n*—untangled fiber ends that protrude from the surface of a yarn or fabric. **[D13.58] D 2255**

fuzz ball, *n*—loose and frayed fibers that have formed into a ball and have then been woven or knitted into the fabric. (Compare **pills.**) **[D13.59] D 3990**

fuzzy, *adj*—characterized by a hairy appearance due to broken fibers or filaments. **[D13.58] D 2255, D 5647, D 3990**

gage, *n—of a tufting machine*, the average centerline distance between the needles. **[D13.21] D 418**

gage, *n—of tufted pile yarn floor covering*, the average distance between adjacent binding sites in the widthwise direction. **[D13.21] D 418, D 4269**

gage, *n—in knitted fabrics*, a measure of fineness expressing the number of needles per unit of width (across the wales). **[D13.59] D 4850**

gage, *n—in full-fashioned hosiery*, a measure of fineness expressing the number of needles per 38 m (1.5 in.) on the needle bar. **[D13.59] D 4850**

gage, *n—in warp knitting*, for simplex, tricot, milanese, number of needles per English inch; for raschel, kayloom, twice the number of needles per English inch. **[D13.59] D 4850**

gage length, *n—in tensile testing*, the length of a specimen measured between the points of attachment to clamps while under uniform tension. **[D13.13] D 1294, D 2524**

gaiting, *n—in warp knitting*, the setting of a guide bar one or more needle spaces to the right or left in order to increase the pattern possibilities. **[D13.59] D 4850**

generic class, *n—as used with textile fibers*, a grouping having similar chemical compositions or specific chemical characteristics. **[D13.58] D 4466**

ginned lint, *n*—cotton fibers that have been separated from their seeds by ginning but not subjected to any further processing after ginning. (See **lint cotton**.) **[D13.11] D 2495**

glass count, *n*—an indirect yarn numbering system, equal to the number of 100 yd. lengths per pound. **[D13.58] D 2260**

gloss, *n*—the luminous fractional reflectance of a material in the specular direction. (See **specular gloss**) **[D13.58] D 3218, D 3334**

glow, *n*—visible, flameless combustion of the solid phase of a

material. (See also **afterglow** and **smoldering**.) **[D13.92] D 4372, D 4391**

glued seam, *n*—a seam formed by an adhesive. (Compare **sewn seam, stapled seam, thermally bonded seam**.) **[D13.53] D 4965**

gout, *n*—foreign matter trapped in a fabric by accident, usually lint or waste. (See also **slug.**) **[D13.59] D 3990**

grab test, *n—in fabric testing*, a tensile test in which the central part of the width of the specimen is gripped in the clamps.

DISCUSSION—For example, if the specimen width is 100 mm (4.0 in.) and the width of the jaw faces 25 mm (1.0 in.), the specimen gripped in the clamp with approximately 37.5 mm (1.5 in.) of fabric protruding from each side of the jaws. **[D13.60] D 4850, D 5034**

grade, *n—in warp knitting*, a term used to indicate the defect index evaluation of fabric determined by the number of defects per unit, for example per pound, per linear yard, or per square yard. **[D13.59] D 4350, D 4850**

grade, *n—in wool and mohair*, a numerical designation used in classifying wool and mohair in their raw, semi-processed, and processed forms based on average fiber diameter and variation of fiber diameter. **[D13.13] D 2130, D 3991, D 3992**

grade, *v*—to assign a numerical value based on number, size, and severity of defects seen during a visual inspection. **[D13.59] D 5430**

grading, *n*—the procedure used to identify and quantify the number of imperfections in a roll of fabric detected during visual inspection. **[D13.20] D 5426**

grain, *n—in yarn spinning*, a direct yarn numbering system for sliver, top or roving, equal to the mass in grains of 120 yds. (See **American grain count**) **[D13.58] D 2260**

grain, *n—in measuring mass*, 1/7000 lb avoirdupois. **[D13.58] D 2260**

gray felt, *n*—a blend of white fibers with naturally colored or dyed fibers, *or both*, that has an overall gray appearance. **[D13.13] D 2475**

grease wool, *n*—wool taken from the living sheep and which has not been commercially scoured. **[D13.13] D 1234, D 1574, D 1576, D 2462**

greige cord, *n—in tire cords*, a cord that has not been adhesive treated, or otherwise treated before use. (See **cord** **[D13.19] D 4974, D 5591**

greige goods, *n*—textile fabrics that have received no bleaching, dyeing, or finishing treatment after being produced by any textile process. **[D13.18] D 579, D 580, D 581, D 5429**

greige thread, *n*—undyed or unfinished sewing thread in the state following final plying or equivalent step in processing sequence, such as extruding, texturizing, or braiding. **[D13.58] D 204, D 3823**

greige yield, *n—in knitted fabrics*, the number of finished square yards per pound (square metres per kilogram) of greige fabric. **[D13.56] D 3887**

grex, *n*—an obsolete direct numbering system for fiber yarn or other textile strand equal to the mass in grams per 10 000 m. **[D13.58] D 1059, D 2260**

grin, *v—in sewn seams*, to stress a seam so that the individual stitches can be seen. **[D13.54] D 1908**

grip, *v—in tensile testing*, to hold, grasp, or secure, for example, to grip the specimen by the jaws of the clamps. **[D13.58] D 76**

group, *n—in upholstered furniture*, a number of individual upholstered furniture units that are related by one or more physical characteristics such as styling, color, shape or covering. **[D13.63] D 4852**

growth, *n*—an increase in one or more dimensions of an object or a material. **[D13.58] D 204**

growth, *n*—the increase in length of a specimen caused by the application of a continuing load or force under specified conditions. (See also **delayed deformation**.) **[D13.19] D 885, D 885M**

growth, *n—of textiles*, the difference between the original length of a specimen and its length after the application of a specified force for a prescribed time, and the subsequent removal of the force. (See also **permanent deformation and dimensional change.**) **[D13.59] D 2594, D 3107**

hackling, *n—in flax*, the process of cleaning and aligning long-line fibers to improve fineness and remove non-fibrous materials and short fibers. **[D13.17]**

hair, *n*—natural animal fiber other than sheep's wool or silk. **[D13.13] D 4845**

hairiness, *n—of yarns*, an overall condition characterized by filaments or fibers protruding from the yarn surface and uniformly distributed along the yarn length. (Compare wild fibers.) **[D13.58] D 5647**

hand-overcast seam-finish, *n*—a finish for the raw edges of a plain seam, in which hand stitches are taken over the raw edges of each seam allowance. **[D13.53] D 4965**

hand washing, *n*—the most gentle form of home laundering using hand manipulation without the use of a machine or device such as a scrubbing board. **[D13.62] D 3136**

hang pick, *n*—a pick, caught on a warp yarn knot for a short distance, producing a triangular-shaped hole in the fabric. **[D13.59] D 3990**

hardness, *n—in water*, dissolved salts of calcium, magnesium, and other cations that destroy the action of soap; expressed as parts per million (ppm) or grains per gallon (gr/gal) of calcium carbonate. (Compare **softness**.) **[D13.53] D 5429**

hard size, *n*—sections of cloth containing an excessive quantity of sizing. **[D13.59] D 3990**

hard water, *n—in textile conservation*, water having a concentration of more than 60 ppm (3.5 gr/gal) hardness calculated as calcium carbonate. **[D13.53] D 5429**

hawser twist, *n*—the construction of cabled yarn, cord, or rope in which the single and first-ply twist are in the same direction and the second-ply twist is in the opposite direction, and S/S/Z or Z/Z/S construction. **[D13.58] D 1423**

head, *n—in zippers*, the portion of the element that engages the pocket. **[D13.54] D 2050**

head girth, *n—in body measurements*, the maximum circumference of the head above the ears. **[D13.55] D 5219**

heat durability, *n*—the extent to which a material retains its useful properties at ambient air conditions, following its exposure to a specified temperature and environment for a specified time and its return to the ambient air conditions.

(Compare **heat resistance**.) **[D13.92] D 4391**

heat durable, *adj*—having heat durability. **[D13.92] D 4391**

heat flux, *n*—the thermal intensity indicated by the amount of power per unit area. **[D13.92] D 4391**

heat resistance, *n*—the extent to which a material retains useful properties as measured during exposure of the material to a specified temperature and environment for a specified time. (Compare **heat durability**.) **[D13.92] D 4391**

heat resistant, *adj*—having heat resistance. **[D13.92] D 4391**

heat shrinkage, *n*—a decrease in one or more dimensions of an object or material exposed to heat. **[D13.58] D 3218**

heel-ankle circumference, *n—in body measurements*, with the subject standing barefoot, the distance around the foot from the point where the back of the heel contacts the floor and over the juncture of the foot and leg at the front of the ankle and back to the starting point. **[D13.55] D 5219**

height, *n—in body measurements*, the vertical distance from the crown of a standing subject to the soles of the feet. **[D13.55] D 5219**

high elongation, *adj—in steel tire cord*, a cord with an average elongation at break greater thatn 3.0% **[D13.19] D 2969**

high-hip girth, *n—in body measurements*, the circumference of the body at a point approximately 7.5 cm (3 in.) below the waist and parallel to the floor. (Compare **hip girth**.) **[D13.55] D 5219**

high-modulus aramid, *n—for the purpose of these test methods*, those aramid yarns with an initial modulus of at least 400 gf/den (35 N/tex). **[D13.19] D 885**

high-tenacity fiber, *n*—a manufactured fiber either (*1*) belonging to a generic class of fibers having exceptional breaking strength; or (*2*) having a breaking strength significantly greater than the average strength of other (regular tenacity) fibers in the same generic class and of equivalent linear densities. **[D13.92] D 123**

DISCUSSION—High-tenacity fibers are usually used in industrial products where mechanical properties, such as strength, are major factors in fiber selection. Comparative examples are as follows:

Generic Class	Typical Tenacity Range, dN/tex[A]	
	Regular Tenacity	High Tenacity
Aramid	3.3 to 4.9	18 to 22
Carbon	...	15 to 21
Glass	...	13 to 18
Nylon	2.2 to 4.4	5.3 to 8.7
Polyester	2.2 to 5.0	5.3 to 8.4
Rayon	0.6 to 2.3	2.6 to 5.3

[A]To convert to grams-force per tex, multiply by 88.3. **D 123**

highloft nonwoven fabric, *n*—a low-density fiber network structure characterized by a high ratio of thickness to mass per unit area. **[D13.64] D 5736**

hip, *n—in anatomy*, the laterally projecting region formed by the lateral parts of the pelvis and the upper part of the femur together with the flesh covering them. **[D13.55] D 5219**

hip girth, *n—in body measurements*, the maximum circumference of the body at the level of maximum prominence of the buttocks. **[D13.55] D 5219**

hockle, *n—in rope*, a strand kink in a rope causing yarn displacement in the strand resulting in rope deformation and damage. **[D13.16] D 4268**

hole, *n—in fabric*, an imperfection where one or more yarns are sufficiently damaged to create an aperture. **[D13.59] D 3990, D 5426**

hole—*in inflatable restraint fabrics*, an ipening not characteristic of the normal weave pattern where one or more yarns is cut, torn, or shifted. **[D13.20] D 5426**

hole spacing, *n—on a button*, the distance from the center of one hole to another. **[D13.54] D 5497**

holland cloth, *n*—a completely filled woven fabric having a smooth gloss finish on both sides used as a separating medium for sheeted rubber compounds. **[D13.19] D 1871, D 4393**

hollow braid, *n—in rope*, a braided construction of either plain or twill braid, having an empty center. **[D13.16] D 4268**

home laundering, *n*—a process by which textile products or parts thereof may be washed, bleached, dried, and pressed by any customary method designed for use in a residence, or nonprofessional use. (See also **professional care**.) **[D13.62] D 3136**

Hong Kong seam-finish, *n*—a finish for the raw edges of a plain seam, in which a binding fabric encloses the raw edge of each seam allowance; the binding fabric has one raw edge enclosed and the other raw edge exposed. (Compare **bound seam-finish**.) **[D13.53] D 4965**

hook and loop fastener—a touch fastener, comprised of two flexible mating strips, the surface of one mating strip being covered with tiny, stiff protrusions shaped like hooks which engage the other mating strip which is covered with pliable loops. **[D13.54] D 5169**

hooked bow, *n*—a fabric condition in which the filling yarns or knitted courses are in the proper position for most of the fabric width but are pulled out of alignment at one side of the fabric. (See also **double hooked bow**) **[D13.60] D 3882**

hooks, *n—in fiber testing*, curved or bent fiber ends caused by the carding or specimen preparation processes. **[D13.11] D 5332**

horseshoe, *n*—a length of sliver folded in a manner such that the two ends can be fed simultaneously into the needle field of the Fibroliner FL-101. **[D13.11] D 5332**

hose reinforcing wire, *n*—a single filament of steel wire with a metallic coating (usually brass) used in the reinforcement of a rubber or other elastomer hose **[D13.19] D 1871, D 6320**

hot water extraction cleaning, *n*—a process in which a heated solution of detergent is sprayed into the textile material and immediately removed by a wet suction nozzle behind the spray-head. **[D13.62] D 5253**

huck towel, *n*—a plain weave nonterry foundation product constructed with small warp and filling floats, having hems or selvages, which is used to dry a person's hands and utensils such as glasses, plates, bowls, and flatware. **[D13.63] D 5433**

humidity, *n*—the condition of the atmosphere in respect to water vapor. (Compare **absolute humidity** and **relative humidity**.) **[D13.51] D 4920**

hydrolytic stability, *n*—the ability to withstand the environmental effects of high humidity. **[D13.56] D 3690**

hygrometer, *n*—any instrument for measuring the humidity of the atmosphere. **[D13.51] D 2654**

IC/TC, *n*—abbreviation for Intelligent Color/Trash Coordinator. **[D13.11] D 4604**

IDT, *n*—abbreviation for Intelligent Data Terminal. **[D13.11] D 4604**

ignition, *n*—the initiation of combustion. **[D13.92] D 2859, D 4151, D 4392, D 5684**

ignition loss, *n—in glass textiles*, the amount of organic material consumed by ignition. **[D13.18] D 4963**

illumination, *n—in lighting*, the density or flux of light on a unit area of surface. **[D13.11] D 1684**

immature fibers, *n*—(*1*) (cotton fibers treated with sodium hydroxide solution)—fibers that either (*a*) have swollen and assumed a spiral form, or (*b*) remained flat, thinly outlined, and almost transparent. Total wall width is less than the lumen width.

(*2*) (cotton fibers observed under polarized light)—fibers that appear purple, indigo, or blue, turn orange or yellow-orange upon rotation to the subtractive position, and upon removal of the selenite plate show parallel extinction. (Compare **mature fibers.**) **[D13.11] D 1442**

immediate elastic recovery, *n*—recoverable deformation which is essentially independent of time, that is, occurring in (a time approaching) zero time and recoverable in (a time approaching) zero time after removal of the applied force. (See **delayed deformation**.) **[D13.58] D 4848**

impact resistance, *n*—resistance to fracture under the sudden application of an external force. **[D13.54] D 5171**

imperfection, *n*—a departure of a quality characteristic from its intended level or state. **[D13.20] D 5426**

impregnated fabric, *n*—a fabric in which the interstices between the yarns are completely filled with the impregnating compound throughout the thickness of the fabric, as distinguished from sized or coated fabrics, where these interstices are not completely filled.

DISCUSSION—A fabric woven from impregnated yarns, but not impregnated after weaving, is not an impregnated fabric. **[D13.59] D 4850**

indirect yarn numbering system, *n*—a system that expresses the linear density of yarn in length per unit mass.

DISCUSSION—The preferred units of measurements for the indirect yarn measuring system are yards and pounds. Cotton count (number of 840 yard lengths per pound), worsted count (number of 560 yard lengths per pound), metric count (number of 1000 metre lengths per kilogram), woolen run (number of 1600 yard lengths per pound) and number of yards per pound are commonly used in the indirect numbering system. These can be calculated by dividing the number of specified lengths of a yarn by its unit of mass. Conversion factors to convert between indirect and direct numbering systems can be found in Standard Tables D2260. **[D13.58] D 1059, D 1907, D 2260**

indoor furniture, *n*—furniture manufactured for use in the interior of a building. **[D13.56] D 4771**

industrial yarn, *n*—a yarn composed of continuous filaments, usually of high breaking tenacity, produced with or without twist, and intended for applications in which functional properties are of primary importance; for example, in reinforcing material in elastomeric products (tires, hose, belting), in protective coverings, and in cordage and webbing, etc. **[D13.19] D 885, D 2970, D 4776**

industry products, *n—for feathers or down*, products such as furniture, pillows, comforters, sleeping bags, and wearing apparel which are wholly or partially filled with feathers or down; bulk stocks of processed feathers or down intended for use in the manufacture of such products. **[D13.61] D 4523**

inflatable restraint, *n*—a vehicular safety device designed to cushion an occupant or equipment during collision; airbag. **[D13.20] D 5426, D 5427, D 5428**

inflator, *n—for inflatable restraints*, a device for generating and directing expansion gases into a cushion. **[D13.20] D 5428**

inherent flame-resistance, *n—as applied to textiles*, flame resistance that derives from an essential characteristic of the fiber from which the textile is made. (Compare **flame resistance.**) **[D13.92] D 4391**

inherently flame-resistant, *adj*—having inherent flame-resistance. **[D13.92] D 4391**

initial modulus, *n*—the slope of the initial straight portion of a stress-strain or force-elongation curve. **[D13.58] D 885, D 2101, D 2970, D 3218, D 3822**

injection molded button, *n*—a method of forming which requires the filling of a cavity under pressure with polymer that will take the form of the mold when cooled. **[D13.54] D 5497**

injection molding, *n*—the process of forming a material by forcing it, in a fluid slate under pressure, through a runner system (sprue, runner, gate(s) into the cavity of a closed mold. **[D13.54] D 5497**

in-plant cleaning, *n—for textile floor coverings*, a cleaning process performed in a facility away from the location where the product is used. **[D13.62] D 5253**

insect screening, *n—in coated glass yarn fabrics*, a woven netting having an approximately even spaced mesh of 12 by 12 yarns or more per 25.4 mm (1 in.) **[D13.18] D 3656**

inside-leg length, *n—in body measurements*, the vertical distance from the crotch to the soles of the feet. **[D13.55] D 5219**

inside seam, *n*—a seam formed in which the completed seam allowance is located on the interior of the object, usually on the back side of the fabric. (Compare **outside seam**.) **[D13.53] D 4965**

inspection, *n*—the process of measuring, examining, testing, gaging, or otherwise comparing a characteristic or property of a material with applicable requirements. In this case only by visual examination. **[D13.59] D 5430**

inspection, *n—in fabric grading*, the process of viewing, measuring, examining, or otherwise comparing the visual characteristics of a fabric with applicable requirements. **[D13.20] D 5426**

integrator, *n—in the tensile testing of textiles*, a device for obtaining the time integral of the load. **[D13.60] D 2261**

integrator, *n—in textile unevenness testing*, a device that calculates the coefficient of variation unevenness or the

mean deviation unevenness. **[D13.58] D 1425**

interaction, *n*—the condition that exists among factors when a test result obtained at one level of a factor is dependent on the level of one or more additional factors. **[D13.93] D 4853**

interference, *n*—*in testing*, an effect due to the presence of a constituent or characteristic that influences the measurement of another constituent or characteristic. **[D13.93] D 4855**

interlaboratory testing—the evaluating of a test method in more than one laboratory by analyzing data obtained from one or more materials that are as homogeneous as practical. **[D13.93] D 4467**

interlining, *n*—any textile which is intended for incorporation into an article of wearing apparel as a layer between an outer shell and inner lining. **[D13.54] D 1230, D 2724, D 3135**

invisible waste, *n*—*in cotton testing*, weight loss due to dust, moisture, loose fibers, etc., carried away by the air stream during the test. **[D13.11] D 2812**

ironing, *n*—a method of pressing using a heated hand iron, sometimes together with mositure or steam, and a gliding motion. **[D13.62] D 3136**

jacket, *n*—a textile, woven or felted into tubular or sleeve form, ready for covering and shrinking on a machine roll. **[D13.59] D 4850**

jaw face, *n*—*in tensile testing machines*, the surface of a jaw which in the absence of a liner contacts the specimen. **[D13.58] D 76**

jaw liner, *n*—*in tensile testing machines*, any material placed between the jaw face and the specimen to improve the holding power of the jaws. **[D13.58] D 76**

jaws, *n*—*in tensile testing machines*, the elements of a clamp which grip the specimen. **[D13.58] D 76**

jerk-in, *n*—*in woven fabric*, an extra filling thread dragged into the shed with the regular pick and extending only part of the way across the cloth. (Compare **double pick, mispick**.) **[D13.59] D 3990**

jute, *n*—soft fibers from the inner bark of the round pod jute (*Corchorus capsularis*), the long pod jute (*Corchorus olitorius*), and from the inner bark of other closely related plants, such as kenaf, sometimes referred to as Meshta (*Hibiscus cannabinus*). (See also Table A2.5 in Annex A2) **[D13.16] D 681**

kelvin, *n*—the unit of thermodynamic temperature; the SI unit of temperature for which an interval of one Kelvin (K) equals exactly an interval of one degree Celsius (1°C) and for which a level of 273.15 K equals exactly 0°C. **[D13.92] D 123**

kemp fiber, *n*—a medullated animal fiber in which the diameter of the medulla is 60 %, or more, of the diameter of the fiber. **[D13.13] D 2968**

kinetic friction, *n*—friction developed between two bodies in motion. (Compare **static friction**.) **[D13.58] D 3108**

kink, *n*—*in fabric*, a short length of yarn that has spontaneously doubled back on itself to form a loop. **[D13.59] D 3990**

kink, *n*—*in rope*, an abrupt bend or loop in the rope which is the result of an unbalanced twist relationship in the rope structure. **[D13.16] D 4268**

knee, *n*—*in anatomy*, the joint between the lower and upper leg. **[D13.55] D 5219**

knee girth, *n*—*in body measurements*, with the leg straight, the circumference of the knee over the knee cap and parallel to the floor. **[D13.55] D 5219**

knitted fabric, *n*—a structure produced by interlooping one or more ends of yarn or comparable material. **[D13.60] D 3786, D 3787, D 3789, D 3882, D 3887, D 4850, D 5378**

knot breaking force, *n*—*in tensile testing*, the breaking force of a strand having a specified knot configuration tied in the test method portion of the strand mounted between the clamps of a tensile testing machine. (Compare **knot breaking strength.** See also **breaking force.**) **[D13.58] D 204, D 4848**

knot-breaking strength, *n*—strength expressed in terms of knot breaking force. (See **knot breaking force.**) **[D13.58] D 2256, D 4848**

laboratory sample, *n*—a portion of material taken to represent the lot sample, or the original material, and used in the laboratory as a source of test specimens. **[D13.93] D 1441, D 2258, D 2525, D 2905, D 2906, D 3333, D 3777, D 4271, D 4854**

laboratory sample, *n*—*in wool top*, portions drawn from the lot in accordance with the described procedure. **[D13.13] D 1770**

laboratory sampling unit, *n*—a portion of material taken to represent one of the lot sampling units or the original material and used in the laboratory as a source of test specimens. **[D13.93] D 4271**

laid fabric, *n*—a fabric made without filling yarn, the parallel warp yarns being held together by means of rubber latex or other binding material. **[D13.59] D 4850**

laminated fabric, *n*—a layered fabric structure wherein a face or outer fabric is joined to a continuous sheet material, such as polyurethane foam, in such a way that the identity of the continuous sheet material is retained, either by the flame method or by an adhesive, and this in turn normally, but not always, is joined on the back with a backing fabric such as tricot. (See also **bonded fabric, coated fabric**.) **[D13.54] D 2724, D 3135**

laminated fabric, *n*—*in fabric roof systems*, a flexible fabric system composed of superimposed layers of fabric firmly united by bonding or impregnating with an adherent polymeric material to one or more surfaces. **[D13.59] D 4851**

lapped seam, *n*—a complex seam formed on the inside of the object with neither raw edge enclosed, and having one visible line of topstitching on the face side and a small fold formed by the topstitching. (Compare **tucked seam**.) **[D13.53] D 4965**

lapped seam for leather or nonwoven material, *n*—*in home sewing*,a complex seam formed on the outside of the product, with neither cut edge enclosed, and having one or two rows of stitching and a cut edge visible from the outside. (Compare **lapped seam for woven or knitted fabric**.) **[D13.53] D 4965**

lapped seam for woven or knitted fabric, *n*—*in home sewing*,a complex seam formed on the inside of the product

with neither raw cut edge enclosed, and having one visible line of topstitching on the face side and a small fold formed by topstitching.(Compare **tucked seam**.) **[D13.53] D 4965**

lateral, *adj*—a descriptive term for a textile fiber composed of two or more polymers at least two of which have a continuous longitudinal external surface. **[D13.58] D 4466**

lateral holding strength, *n*—the force required to disengage a snap fastener resulting from a pull in the plane parallel to the material to which the snap fastener is attached. **[D13.54] D 4846**

launderability, *n—in buttons*, the ability of a button to undergo multiple cycles of laundering without damage such as cracks or loss of finish. **[D13.54] D 5497**

laundering, *n—in textile product care*, a process intended to remove soil or stains by treatment (washing) with an aqueous detergent solution (and possibly bleach) and normally including subsequent rinsing, extracting, and drying.. **[D13.62] D 3136, D 3938, D 5497**

lea, *n—in cotton yarns*, the number of 120-yd lengths of yarn per pound; an indirect yarn numbering system. **[D13.58] D 1059**

lea, *n—in linen yarns*, the number of 300-yd lengths of yarn per pound; an indirect yarn numbering system. **[D13.58] D 1059, D 2260**

least count, *n—in tensile testing machines*, the smallest change in the indicated property that can customarily be determined. (See **sensitivity**) **[D13.58] D 76**

least difference of practical importance, δ, *n*—the smallest difference based on engineering judgment deemed to be of practical importance when considering whether a significant difference exists between two statistics or between a statistic and a hypothetical value. **[D13.93] D 4855**

legs, *n—in zippers*, the two portions of a separate element that affix the element to the bead. **[D13.54] D 2050**

length, *n—of a fabric*, the distance from one end of a fabric to the other, measured parallel to the side edge of the fabric while it is under zero tension and is free of folds or wrinkles. **[D13.60] D 3773, D 3887**

length analyzer, *n*—an instrument which determines the upper-half-mean length and length uniformity index of a test beard of cotton. **[D13.11] D 4604**

length between, L_b**, n**—*in textile unevenness testing*, the length between which unevenness is measured; the equivalent of the length of strand segments weighed in a direct method of measuring unevenness. **[D13.58] D 1425**

length distribution, *n—of staple fibers*, a graphic or tabular presentation of the proportion or percentage (by number or by mass weight) of fibers having different lengths. **[D13.58] D 5103, D 5332**

length group, *n*—all fibers, or pulls, whose lengths fall within a given length interval. **[D13.11] D 1440**

length interval, *n*—a class interval of ⅛ in. (3 mm), usually designated by its midpoint length in odd-numbered sixteenths of an inch. **[D13.11] D 1440**

length of tear, *n—in tear testing of fabrics*, the measured distance propagated in a specimen by a tearing force from the initiation of the test to the termination of the test. **[D13.60] D 1424, D 2261**

length within, L_w**, n**—*in textile unevenness testing*, the length over which unevenness is measured. **[D13.58] D 1425**

lengthwise direction, *n—in textiles*, the direction in a machine-made fabric parallel to the warp yarns **[D13.21] D 5251, D 5252, D 5417, D 5684, D 6540**

leno weave, *n*—a weave in which two adjacent warp yarns cross each other between the picks. **[D13.18] D 579, D 4029**

let-off mark, *n—in woven fabrics*, a corrugated defect pattern distributed across the fabric width. (See **crack mark** and **shier**.) **[D13.59] D 3990**

level pile, *n—for pile yarn floor covering*, pile in which all tuft legs are of substantially the same length. **[D13.21] D 418**

ligne, *n*—a unit of measure for buttons, one ligne equals 0.635 mm (0.025 in.) **[D13.54] D 5497**

ligne size, *n*—a unit of measure for button diameter; one ligne equals 0.635 mm (0.025 in.). **[D13.55] D 5219**

limiting quality level *(LQL* **or ,** *n—in acceptance sampling*, the fraction of nonconforming items at which the process average can be considered barely tolerable; the process average at which the risk of acceptance is called the **consumer's risk**. **[D13.93] D 3777, D 4271**

linear density, *n—for fiber and yarn*, mass per unit length. **[D13.58] D 861, D 1059, D 1577, D 1769, D 2101, D 2480, D 3217, D 3822**

linear integrator, *n—in textile unevenness testing*, an integrator that operates continuously and reports unevenness for a certain, and unchanging, time past. (*Syn.* fading memory integrator) **[D13.58] D 1425**

linear lea, *n*—an indirect yarn numbering system in the linen spinning system equal to the number of 300-yd lengths per pound. **[D13.58] D 2260**

linen, *n*—a yarn or fabric made solely from flax fibers. **[D-13.17]**

linen blend, *n*—a yarn or fabric made from a combination of flax and other fibers. **[D13.17]**

lining fabric, *n—for apparel*, a textile used to cover the inner sides of garments. **[D13.56] D 3783**

lint, *n—in loose cotton*, fibers mostly of spinnable length. (See also **linters**.) **[D13.11] D 2812**

lint content, *n*—that portion of a mass of cotton fiber consisting of fiber, including normal moisture content, but excluding foreign matter. **[D13.11] D 2812**

lint cotton, *n*—loose cotton fibers in any form, either raw or processed, free of seeds and not bound together in yarn or fabric. (See also **ginned lint**.) **[D13.11] D 2495**

linters, *n*—the short fibrous material adhering to the cotton seed after the spinnable lint has been removed by ginning and which is subsequently recovered from the seed by a process called "delinting." **[D13.11] D 4604**

lisle, *n*—a fine high-twisted and hard-twisted cotton thread, at least two-ply, used especially for hosiery.

DISCUSSION—Lisle refers also to knit goods used in gloves or hose made from lisle thread (first made in Lisle, France).

lisle, *n*—for a definition of cotton lisle see Rule 3 of the

"Amended Trade Practice Rules for the Hosiery Industry," as promulgated by the Federal Trade Commission, Aug. 30, 1960 and amended June 10, 1964. **[D13.59] D 4850**

load, *vt*—to apply a force. **[D13.58] D 4848**

force-recovery cycle, *n—in elastic fabric testing*, a continuous curve or plot of force versus elongation (with movement stopped momentarily at point of reversal) describing the elongation and recovery of an elastic fabric; also known as the loading and unloading cycle. **[D13.58]**

long knot, *n—in raw silk*, knots which have loose ends from 3 to 25 mm in length. **[D13.59] D 3990**

long line, *n*—flax fiber bundles that have a minimum length of 50 cm. **[D13.17]**

long slug, *n—in raw silk*, a slug which exceeds 10 mm (½ in.) in length or which is very much larger in diameter than the yarn. **[D13.59] D 3990**

loom fly, *n*—waste fibers created during weaving, that are woven into a fabric. **[D13.59] D 3990**

loop breaking force, *n—in tensile testing*, the breaking force of a specimen consisting of two lengths of strand from the same supply looped together in a specified configuration and mounted between the clamps of a tensile testing machine. (Compare **loop breaking strength.** See also **breaking force.**) **[D13.58] D 204, D 4848**

loop-breaking strength, *n*—strength expressed in terms of loop breaking force. (See **loop breaking force, strength.**) **[D13.58] D 4848**

loop pile yarn floor covering, *n*—a pile yarn floor covering in which the pile is composed only of uncut loops. **[D13.21] D 1335,**

loop tension, *n—in elastic material testing*, the total tension at any specified extension that is exerted on a specimen in a loop formation. **[D13.58] D 4848**

loop pile floor covering, *n*—a pile yarn floor covering in which the pile is composed only of uncut loops. **[D13.21] D 1335, D 5684, D 5823, D 6283**

loopy, *adj*—a descriptive term for yarns having randomly sized loops of fibers or filaments protruding from the yarn surface.

DISCUSSION—Loopiness may or may not be desirable depending on the yarn's end-use. **[D13.58] D 5647**

loopy selvage, *n*—an improperly woven selvage of uneven width or a selvage containing irregular filling loops extending beyond the outside selvages. **[D13.59] D 3990**

loose course, *n—in knitted fabrics*, a row of loops in the widthwise direction that is larger, looser, or longer than the stitches in the main body of the fabric. **[D13.59] D 3990**

loss of tuft definition, *n—for pile yarn floor coverings*, the bursting, opening, and untwisting of pile yarn, decrimping of the fibers in the surface pile, or any combination of these. **[D13.21] D 5684, D 6119**

lot, *n—in acceptance sampling*, that part of a consignment or shipment consisting of material from one production lot. **[D13.93] D 2258, D 2525, D 3333, D 3777, D 4271, D 4392**

lot, *n—in acceptance sampling of cotton*, the main stock, supply, or source of fibers to be sampled. **[D13.11] D 1441**

lot, *n—in bonded, fused, or laminated fabric*, a single run on the bonding or laminating machine in which the processing is carried out without stopping or changing processing conditions, and consisting of either a single dye lot or a single gray goods lot. **[D13.54] D 2724**

lot, *n—in wool top*, the entire quantity, not exceeding 20 000 lb (9100 kg) of a single combing, that comprises a single unit for which a test for neps, vegetable matter, or colored fiber, or all three combined is desired. **[D13.13] D 1770**

lot sample, *n*—one or more shipping units taken at random to represent an acceptance sampling lot and used as a source of laboratory samples. (See **bulk sample.**) **[D13.93] D 2258, D 2525, D 2906, D 4854**

lot sample, *n—in cotton*, a relatively large sample taken in the field to represent a consignment, shipment, or lot, for use in the preparation of the laboratory samples. **[D13.11] D 1441**

low-power stretch, *n*—that property of a fabric whereby it exhibits high fabric stretch and good recovery from low tension **[D13.59] D 2594**

lot sampling unit, *n*—a portion of material taken to represent a lot and used as a source of laboratory sampling units or test specimens, or both. (See **primary sampling unit.**) **[D13.93] D 4271**

lot tolerance fraction defective, *n*—the process average at which quality is considered barely tolerable; the process average at which the risk of acceptance is called the consumer's risk. **[D13.93] D 3777**

louver cloth, *n—in coated glass yarn fabrics*, a woven netting having an approximately even-spaced mesh of fewer than 12 by 12 yarns per 25.4 mm (1 in.) **[D13.18] D 3656**

low power stretch, *n*—that property of a fabric whereby it exhibits high fabric stretch and good recovery from low tension. **[D13.59] D 2594**

lumen, *n—in vegetable fibers*, the central canal of the fiber. **[D13.11] D 1442**

luster, *n—in buttons*, the degree of brilliance exhibited in pearlized or pearl buttons. **[D13.54] D 5497**

machine direction, MD, *n*—the direction in the plane of the fabric parallel to the direction of manufacture. **[D13.64] D 5732**

machine stitch, *n—in home sewing*, the resulting arrangement of sewing threads in a repeating unit formed by a sewing machine. **[D13.53] D 5646**

main components, *n—in textiles*, those sections of a consumer product which constitute the largest continuous homogeneous areas of the product that are typical of the product. **[D13.62] D 3938**

maintain, *vt*—to monitor the usage of test methods and to take remedial steps when necessary. **[D13.93] D 4697**

major defect, *n*—a defect other than critical, that judgment and experience indicate is likely to materially reduce the usability of a product for its intended purpose. **[D13.59] D 5430**

major imperfection, *n—in fabric grading*, a deviation in a roll of fabric that judgment and experience indicate is likely to have an adverse affect upon subsequent processing of the fabric. **[D13.20] D 5426**

man-made fiber, *n*—a class name for various genera of filament, tow or staple produced from fiber forming substances which are chemically synthesized or modified. (Syn. **manufactured fiber**) **[D13.92] D 123**

manufactured staple fiber, *n*—fiber of spinnable length manufactured directly or by cutting filaments. **[D13.92] D 2494, D 3217, D 3333**

manufactured fiber, *n*—a class name for various genera of filament, tow, or staple produced from fiber forming substance which may be (1) polymers synthesized from chemical compound, (2) modified or transformed natural polymers, or (3) glass. (See **man-made fiber**) **[D13.92] D 123**

DISCUSSION—Acrylic, nylon polyester, olefin, urethane, and polyvinyl are examples of fiber synthesized from chemical compounds. Cellulose base fibers, such as acetate and rayons, and alginate fibers are examples of modified or transformed polymers.

mass, *n*—the quantity of matter in a body. (See also **weight**.) **[D13.58] D 4849**

material, *n—in home sewing*,a planar structure such as textile fabric, plastic film, or leather **[D13.53] D 4965**

matrix, *adj*—a descriptive term for a textile fiber in which one or more polymeric fibrous material(s) is dispersed in another. **[D13.58] D 4466**

matting, *n—for pile yarn floor covering*, loss of tuft definition due to entanglement **[D13.21] D 5684, D 6119**

mature fibers, *n*—(cotton fibers treated with sodium hydroxide solution)—fibers that have swollen into unconvoluted and almost rod-like shapes, where total wall width is equal to or greater than the lumen width. **[D13.11] D 1442**

mature fibers, *n*—(cotton fibers observed under polarized light)—fibers that appear yellow, yellow green, or green and are yellow or light yellow upon rotation to the subtractive position (through 90°) and show little or no parallel extinction on removal of the selenite plate. (Compare **immature fibers.**) **[D13.11] D 1442**

maturity index, *n*—a relative indication of cotton fiber maturity. **[D13.11] D 2480, D 3817, D 3818**

maximum inflation pressure, *n—for inflatable restraints*, the maximum internal cushion pressure occurring after breakout pressure. **[D13.20] D 5428**

mean deviation unevenness, *U %***,** *n—in textiles*, the average of the absolute values of the deviations of the linear densities of the integrated lengths between which unevenness is measured and expressed as a percentage of the average linear density for the total length within which unevenness is measured. (See also **unevenness, coefficient of variation unevenness.**) **[D13.58] D 1425**

mean length, *n—in testing of cotton fibers*, the average length of all the fibers in the test specimen based on mass-length data. **[D13.11] D 1440**

mean square, *n—in analysis of variance*, a contraction of the expression "mean of the squared deviations from the appropriate average(s)" where the divisor of each sum of squares is the appropriate degrees of freedom. **[D13.93] D 4854**

mean temperature, *n—in thermal transmittance of textiles only*, the average of the hot plate temperature and the temperature of the calm, cool air that prevailed during the test. **[D13.51] D 1518**

measurement value, *n*—the numerical result of quantifying a particular property or dimension. (See **observation**). **[D13.93] D 4697**

med fiber, *n*—a medullated animal fiber in which the diameter of the medulla is less than 60 % of the diameter of the fiber. **[D13.13] D 2968**

median, *n—for a series of observations*, after arranging them in order of magnitude, the value that falls in the middle when the number of observations is odd or the arithmetic mean of the two middle observations when the number of observations is even. **[D13.93] D 4853**

median force, *n—in tensile testing*, that force level that is exceeded by half the recorded peaks and which in turn exceeds the other half of the recorded peaks, in a specified distance of cross-head travel. **[D13.60] D 2261**

medulla, *n—in mammalian hair fibers*, the more or less continuous cellular marrow inside the cortical layer in most medium and coarse fibers. **[D13.13] D 2968**

medullated fiber, *n*—an animal fiber that in its original state includes a medulla. **[D13.13] D 2968**

***melting*,** *n*—the liquefaction of material under the influence of heat.

merino, *adj*—from pure-bred merino sheep. **[D13.13] D 4845**

mesh, *n—in coated glass yarn fabrics*, the number of warp yarns or ends per linear 25.4 mm (1 in.) followed by the number of filling yarns or picks per linear 25.4 mm (1 in.). **[D13.18] D 3656, D 4028**

metal cast button, *n*—a button produced by the casting of molten metals and metal alloys into single cavity or multiple cavity molds. **[D13.54] D 5497**

metric count, *n*—an indirect yarn numbering system for sliver roving, and yarn, equal to the number of kilometers per kilogram (1000m/kg). **[D13.58] D 1059, D 2260**

microfiber batting, *n*—a textile filling material containing fibers, such as polyester or olefin, which have a diameter of less than 10 µm. **[D13.61] D 4770**

micronaire reading, *n*—a relative measurement of fiber fineness derived from the porous plug air-flow method. **[D13.11] D 1442, D 1448, D 4604, D 4605**

mid-neck girth, *n—in body measurements*, the circumference of the neck approximately 25 mm (1 in.) above the neck base (See neck base girth.). **[D13.55] D 5219**

mid-thigh girth, *n—in body measurements*, the circumference of the upper leg between the hip and the knee. **[D13.55] D 5219**

mill grain, *n—in rubber*, grain which is imparted to rubber sheeting while being mixed or conditioned in a rubber mill and which is parallel to the direction the rubber moves in the mill. **[D13.19] D 1871**

minor defect, *n*—a defect that is not likely to materially reduce the usability of the product from its intended purpose, or is a departure from established standards having little bearing on the effective use of operation of a product. **[D13.59] D 5430**

minor imperfection, *n—in fabric grading*, a deviation in a roll of fabric that judgment and experience indicate is likely to

have no bearing on subsequent processing of the fabric. **[D13.20] D 5426**

mispick, *n—in woven fabrics*, a pick not properly interlaced which causes a break in the weave pattern. (See **double pick**.) **[D13.59] D 3990**

misprint, *n—in printed fabric*, colors or patterns, or both, either missed, or partially missed, or incorrectly positioned relative to each other. **[D13.59] D 3990**

misregister, *n—in printed fabric*, colors or patterns not correctly positioned. (Compare **misprint.**) **[D13.59] D 3990**

miss-knit, *n—in knitted fabrics*, a deviation from the designated knitting pattern. **[D13.59] D 3990**

mixed end, *n—in woven fabrics*, a warp yarn differing from that normally being used in the fabric. **[D13.59] D 3990**

mixed filling, *n—in woven fabrics*, a filling yarn differing from that normally being used in the fabric. (See also **filling band**. Compare **barré**.) **[D13.59] D 3990**

mock French seam, *n*—a complex seam formed on the inside of the object with raw edges enclosed and no stitching rows visible on the face side; similar in appearance to the French seam but constructed differently. (Compare **French seam**.) **[D13.53] D 4965**

mock leno weave, *n*—a weave in which the warp yarns remain parallel but form open warp stripes by programmed interlacing of warp and filling yarns simulating a leno appearance. **[D13.18] D 579, D 4029**

mode, *n*—the value of the variate for which the relative frequency in a series of observations reaches a local maximum. **[D13.93] D 4853**

modified grab test, *n—in fabric testing*, a tensile test in which the control part of the width of the specimen is gripped in the clamps and in which lateral slits are made midlength of the specimen severing all yarns bordering that portion of the specimen held between the two clamps.

DISCUSSION—The slit modification reduces the fabric assistance inherent in the grab test procedure to a practical minimum. **[D13.60] D 4850, D 5034**

modified worsted system, *n*—a worsted system for spinning manufactured fibers which relies on pin control of fibers during sliver weight reduction, but which bypasses the system of combing required with wool to remove noil. **[D13.58] D 4911**

module, *n—for inflatable restraints*, an assembly composed of an inflator, a cushion, a mounting device, a trigger, and a cover. **[D13.20] D 5428**

modulus, *n*—the property of a material representative of its resistance to deformation. (See also **chord modulus, initial modulus, tangent modulus, Young's modulus**). **[D13.58] D 4848**

mohair, *n*—the hair of the Angora goat, *Capra* species. **[D13.13] D 3991, D 3992**

moisture, *n—as used with textiles*, water absorbed, adsorbed or resorbed by a material. (See also **water**.) **[D13.51] D 2654, D 4920**

moisture content, n—the amount of moisture in a material determined under prescribed conditions and expressed as a percentage of the mass of the moist material, that is, the original mass comprising the oven-dried substance plus any moisture present. **[D13.13] D 1576, D 2462**

moisture content, *n*—that part of the total mass of a material that is absorbed or adsorbed water, compared to the total mass. (Compare **moisture pick-up** and **moisture regain**.) **[D13.51] D 2495, D 2654, D 4920**

moisture equilibrium, *n*—the condition reached by a material when it no longer takes up moisture from, or gives up moisture to, the surrounding atmosphere. (Compare **moisture-free**.) **[D13.51] D 580, D 581, D 1776, D 2654, D 3374, D 4920**

moisture equilibrium for preconditioning, *n*—the moisture condition reached by a material during free exposure to moving air in the standard atmosphere for preconditioning. **[D13.51] D 1776, D 4920**

moisture equilibrium for testing, *n*—the condition reached by a sample or specimen during free exposure to moving air controlled at specified conditions. **[D13.51] D 1776, D 4920**

moisture equilibrium for testing, *n—for industrial yarns and tire cords*, the condition reached when, after free exposure to a test atmosphere which is in motion, two successive weighings not less than 4 h apart, show not more than 0.1 % progressive change in mass of the specimen or sample. **[D13.19] D 885**

moisture-free, *adj*—the condition of a material that has been exposed in an atmosphere of desiccated air until there is no further significant change in its mass. **[D13.13] D 1576, D 2462**

moisture-free, *adj—in textiles*, a descriptive term for a material that (*1*) has been exposed to a flow of desiccated air at a specified temperature until there is no further significant change in mass, or (*2*) has been treated by a distillation process using a suitable solvent. (Compare **moisture equilibrium**.) **[D13.51] D 2495, D 2654, D 4920**

moisture pick-up, *n*—the mass of absorbed and adsorbed water that is held by material, compared to the mass of the dried material. (Compare **moisture content**, and **moisture regain**.) **[D13.51] D 2654, D 4920**

moisture pick-up, *n—at moisture-equilibrium*, the moisture pick-up of a material in equilibrium with air of known, or specified, temperature and relative humidity. **[D13.51] D 2654, D 4920**

moisture regain, *n*—the amount of moisture in a material determined under prescribed conditions and expressed as a percentage of the mass of the moisture-free material. (See **moisture content**. **[D13.13] D 1576, D 2462**

moisture regain, *n*—the amount of water resorbed by a dried material at specified equilibrium conditions of temperature and humidity, compared to the mass of the dried material. (See **standard moisture regain**. Compare **commercial moisture regain**, **moisture content**, and **moisture pick-up**.) **[D13.51] D 1776, D 2654, D 4920**

monofilament, *n*—a single filament which can function as a yarn in commercial textile operations, that is, it must be strong and flexible enough to be knitted, woven, or braided, etc. (See **yarn**.) **[D13.58] D 3218, D 3822**

mote, *n*—a whole, immature cotton seed. **[D13.11] D 2496, D 4604**

mouth, *n—in zippers*, the opening in a slider that receives the chain. **[D13.54] D 2050**

mouth width, *n—of zippers*, the measurement between the slider flanges at the point where they bear against the shoulders of the interlocked elements or at the outermost edges of the bead if the bead extends beyond the elements. **[D13.54] D 2050**

movable retainer, *n—in zippers*, a movable or sliding device performing a similar function to that of the fixed retainer, the purpose being to permit separation of the two stringers from the bottom, without the necessity of opening the zipper from the top. **[D13.54] D 2050**

moving range, *n*—the difference without regard to sign between two successive observations. **[D13.93] D 4697**

multilevel pile, *n—for pile yarn floor coverings*, pile in which some tuft legs are substantially longer than others, resulting in a sculptured appearance or pattern **[D13.21] D 5684**

multiple length staple fibers, *n*—manufactured staple fibers that are two or more times the nominal cut fiber length. **[D13.58] D 3513**

muslin, *n—as applied to bed sheeting*, a plain weave fabric with not fewer than 128 yarns/in.^{2}(645 mm^2). **[D13.63] D 4036, D5431**

mussiness, *n*—surface distortion in a fabric characterized by undesirable unevenness due to many minor deformations. **[D13.59] D 3990**

narrow elastic fabric, *n*—an elastic fabric that is less than 150 mm, (6 in.), in width. (Compare **wide elastic fabric**.) **[D13.59] D 4848**

narrow fabric, *n*—a fabric not exceeding 12 in. (300 mm) in width.

DISCUSSION—The category of narrow fabrics includes tapes, ribbons, and webbings. Narrow fabrics can be produced from any fiber, including elastomers, by weaving, braiding, knitting, or other methods. They can also be made by cutting or slitting wider fabrics into narrow strips. The term "narrow fabric" is incorrectly applied in the trade to fabrics which are narrower than the normal width for a specific fabric type. For example, woolens and worsteds under 52 in. (1.3 m) wide and cotton sheetings under 40 in. (1.0 m) are often called "narrow fabrics." **[D13.59] D 4850**

natural fiber, *n*—a class name for various genera of fibers (including filaments) of (*1*) animal, (*2*) mineral, or (*3*) vegetable origin. (Compare **man-made fiber.** See also Annex A2.) **[D13.13] D 4845**

navel, *n*—a component of an open-end spinning machine located on the axis of the rotor through which the yarn is withdrawn from the rotor and which modifies the twist of the yarn inside the rotor. (See **doffing tube**.) **[D13.58] D 3888**

neck base girth, *n—in body measurements*, the circumference of the neck over the cervicale at the back and at the top of the collar bone at the front. **[D13.55] D 5219**

necktie, *n*—a decorative band of fabric worn around the neck and tied in a knot or a bow. **[D13.56] D 4035**

needle damage, *n—in sewn fabrics*, the partial or complete yarn severance or fiber fusing caused by a needle passing through a fabric during sewing. **[D13.54] D 1683, D1908**

needled felt, *n*—a textile structure composed entirely of fibers principally interlocked and reoriented through the action of felting needles. **[D13.13] D 2475**

needle-punched batting, *n*—a textile filling material which is stabilized by mechanically entangling the fibers. **[D13.61] D 4770**

needles per unit width, *n—for tufted pile yarn floor covering*, the number of binding sites per unit of floor covering width; needles being the means of inserting the pile yarn into the backing fabric. **[D13.21] D 5684, D 5793**

neoprene treated, *adj—in glass fiber*, a descriptive term for the application of polychloroprene rubber compound to improve the stability, knot holding properties, and abrasion resistance of the cord. **[D13.18] D 4030**

nep, *n*—a tightly tangled knot-like mass of unorganized fibers. **[D13.58] D 1770, D 2255, D 3990**

nestling down, *n*—a down not fully developed with a sheath and with soft barbs emanating from the sheath. **[D13.61] D 4523**

nestling feathers, *n*—immature feathers in which the barbs are held together and covered by a sheath. **[D13.61] D 4523**

noil, *n*—the short fibers removed in combing; applied particularly to wool, but also to other fibers as cotton, silk, and rayon. **[D13.13] D 4845**

nominal gage length, *n—General — in tensile testing*, the length of a specimen under specified pretension measured from nip-to-nip of the jaws of the holding clamps in their starting position at the beginning of the test, and including any portion of the specimen in contact with bollard or snubbing surfaces.

Specific 1, the length of a specimen under specific pretension between frets, in instruments where the specimen is not held by clamps, for example, in a vibroscope.

Specific 2, the length of a specimen measured between the points of attachment to the tabs while under specified pretension. **[D13.58] D 76**

non-chlorine bleach, *n*—a bleach that does not release the hypochlorite ion in solution, for example, sodium perborate, sodium percarbonate. **[D13.62] D 3136**

noncombustible textile, *n*—a textile that will neither ignite nor give off vapors that will ignite when subjected to external sources of ignition. (Compare **combustible textile**) **[D13.92] D 4391**

nonconforming, *adj*—a description of a unit or a group of units that does not meet the unit or group tolerance. **[D13.93] D 3777**

nonconforming item, *n*—an item that does not satisfy the requirements of the applicable specification. **[D13.93] D 4271, D 4392**

nonconformity, *n*—an occurrence of failing to satisfy the requirements of the applicable specification; a condition that results in a nonconforming item. **[D13.93] D 3777, D 4271, D 4392**

non-elastic elongation, (*NE*), *n—of rope*, elongation after cyclic tensioning the rope to a specified force for a specified number of cycles. **[D13.16] D 4268**

nonflammable textile, *n*—any combustible textile that burns without a flame. (See also **glow, smoldering.** Compare

flammable textile, combustible textile, and**noncombustible textile.**) **[D13.92] D 4391**

non-lint content, *n*—that portion of a mass of cotton fiber which is essentially foreign matter. **[D13.11] D 2812**

nonparametric, *adj*—a term referring to a statistical technique that does not assume the nature of the underlying frequency distribution is known. **[D13.93] D 4270**

nonseparable zipper, *n*—a zipper having two stringers that are permanently attached to each other at either or both ends. (Compare **separable zipper**.) **[D13.54] D 2050**

nonwaterfowl feathers, *n*—feathers derived from chickens, turkeys, or other landfowl. **[D13.61] D 4523**

nonwoven blanket, *n*—a blanket produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means, or combination therefore. **[D13.63] D 5432**

nonwoven fabric, *n*—a textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical, chemical, thermal, or solvent means and combinations thereof. **[D13.64] D 1117, D 2646, D 3786, D 3787, D 5684, D 5732, D 5733, D 5734, D 5735, D 5736**

normal distribution, *n*—the distribution that has the probability function:

$$f(x) = (1/\sigma)(2\pi)^{1/2}\exp[-(x-3)^2/2\,9^2) \quad (2)$$

f~x! 5 ~ 1/s!~2p! exp@2~x 2µ! $_2$/2s $_2$#

where:

x = random variate,
μ = mean of the distribution, and
s = standard deviation of the distribution.

(*Syn.* Gaussian distribution, law of error) **[D13.93] D 4686**

novaloid fiber—See **novaloid** in Annex A1.

number of pieces of trash, *n—in testing cotton with the Trash Meter*, a number correlated with the total number of pieces of trash on the surface of the sample of cotton over the viewing window. **[D13.11] D 4604, D 4605**

objects of cultural heritage, *n*—any items taken from nature, or modified or created by humankind that are significant for cultural interpretation and scientific research. **[D13.53] D 5038**

objects of natural heritage, *n*—any items taken from nature, modified or unmodified, that are significant for the interpretation of the natural environment, or that are significant for cultural and scientific research. **[D13.53] D 5038**

observation, *n*—the process of determining the presence or absence of attributes or making measurements of a variable. **[D13.93] D 4271, D 4854**

observation, *n*—a result of the process of determining the presence or absence of an attribute or making a measurement of a variable. (Compare **measurement value, determination value,** and **test result**) **[D13.93] D 4271, D 4392, D 4854**

olefin fiber—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of ethylene, propylene, or other olefin units, except amorphous (noncrystalline) polyolefins qualify under rubber.

on-location cleaning, *n—for textile floorcoverings and upholstered furniture*, a cleaning process performed in the location where a product is used. **[D13.62] D 5253**

one-percent length *(L1 %N),* *n—in fiber testing*, the length exceeded by 1 % of the number of fibers in a test specimen. **[D13.11] D 5332**

open-end spinning machine, *n*—a textile machine for converting staple fiber into spun yarn by a continuous process in which the individual fibers or groups of fibers are caused to assemble at the open end of the forming yarn. (See **rotor-type open-end spinning machine**.) **[D13.58] D 3888**

open-face fabric, *n*—a face or shell fabric constructed with specifically designed open areas to show the substrate when joined to another material. **[D13.54] D 3135**

opening device, *n—in open-end spinning*, either a drafting system or an opening roller which separates the feed stock into individual fibers or very small tufts prior to their reassembly into yarn. (See **feed unit**.) **[D13.58] D 3888**

opening roller, *n—a component of the opening device in open-end spinning machines*, a roller covered with pins or teeth or similar device used to separate the feed stock into individual fibers or very small tufts by a continuous combing action. **[D13.58] D 3888**

operating characteristic curve (OC-curve), *n—in acceptance sampling*, the curve which has as its abscissa a hypothesized lot average, and which has as its ordinate the probability of accepting the lot, when the plan is used. (See also **Type A operating characteristic curve** and **Type B operating characteristic curve.**) **[D13.93] D 3777**

orientation, *n—in buttons*, the degree of order and spatial alignment of pearlescent pigment crystals internally or in a coating. **[D13.54] D 5497**

original twist, *n*—the twist in a single or plied yarn component of a plied or cabled yarn as the component was before incorporation into the more complex structure. **[D13.58] D 1423**

orthopedic and surgical felt, *n*—a white, soft, low-density, highly resilient felt. **[D13.13] D 2475**

other alkali-insoluble impurities, *n—in scoured wool*, the oven-dried, ash-free, alcohol-extractives-free, alkali-insoluble substances other than vegetable matter base, such as skin, cotton or other fibers, paper, string, tag (dung) pieces, and paint pieces, etc. **[D13.13] D 584, D 1113, D 1334**

outside-leg length, *n—in body measurements*, the distance from the side waist to the soles of the feet, following the curve of the body. **[D13.55] D 5219**

outside seam, *n*—a seam formed in which the completed seam allowance is located on the exterior of the object, usually on the face side of the fabric. (Compare **inside seam**.) **[D13.53] D 4965**

oven-dried, *adj*—the condition of a material that has been heated under prescribed conditions of temperature and humidity until there is no further significant change in its mass. **[D13.51] D 584, D 1113, D 1334, D 1576, D 2494, D 2495, D 2654, D 2720, D 4920**

oven-dried wool, *n*—wool dried to moisture equilibrium under specified conditions. **[D13.13] D 1574**

overall cleaning, *n—for upholstered furniture*, the application

of an appropriate cleaning agent to the entire fabric covering, accomplished while the upholstery fabric remains attached to the furniture unit. **[D13.63] D 4852**

overlength staple fibers, *n*—manufactured staple fibers that are at least 10 % longer than the nominal or average cut length. **[D13.58] D 3513**

oxygen number, *n—for plumage*, a measure of the degree of cleanliness; the amount of oxidizable water soluble and fine suspended matter present in a water extract. **[D13.61] D 4523**

pajamas, *n*—a two piece ensemble consisting of a top and a bottom generally used for, but not limited to, nightwear. **[D13.56] D 3819**

papermaker's felt, *n*—a fabric, made from wool or man-made fibers or mixtures of both, fabricated as an endless belt for use on a paper making machine. (See also *felt* and *needled felt*.) **[D13.13] D 2475**

parameter, *n—in statistics*, a variable that describes a characteristic of a population or mathematical model. **[D13.93] D 2906, D 4271, D 4392, D 4855**

parametric, *adj*—a term referring to a statistical technique that assumes the nature of the underlying frequency distribution is known. **[D13.93] D 4270**

part, *n—in upholstered furniture*, one component of a furniture unit, such as a seat, back, pillow, or arm cushion. **[D13.63] D 4852**

part wool felt, *n*—a felt composed of any one of or a combination of new and recycled wool fibers mixed with one or more man-made fibers, vegetable fibers, or animal fibers other than wool. **[D13.13] D 461, D 2475**

partial cleavage, *n—in textiles*, a transverse gouge, cut or other cross-wise rent in the fiber. Clearly penetrating at least the cuticle of the fiber. **[D13.13] D 4510**

partially oriented yarn, *n*—filament yarn in which polymer molecules are only partially aligned. **[D13.58] D 5344**

participant, *n—in wear testing*, any individual that uses a test or control textile during a wear test. **[D13.53] D 3181**

PBI fiber—See PBI in Annex A1.

peak force, *n—for pile floor coverings*, the force required to separate two or more layers and registerd on a chart as a peak, that is, a value exceeding the value immediately preceding and following it. **[D13.21] D 3936, D 5684**

peak force, *n—in tear testing of fabrics*, the maximum force required to break one or more yarn components in a woven or knitted fabric specimen, or break the fiber, fiber bonds or fiber interlocks in other manufactured forms.

DISCUSSION—The peak force may consist of a single peak or a series of peaks depending upon the nature of the fabric. Typically for woven fabrics, if a small decrease in force occurs when the force is increasing, it is not considered to peak unless the indicated force exceeds the force required to break a yarn. Lower shifts corresponding to yarn movement do not qualify as peaks since no yarns are broken. **[D13.60] D 2261, D 2262**

percale, *n—as applied to bed sheeting*, a plain weave fabric with not fewer than 180 yarns/in.^{2}(645 mm^2). **[D13.63] D 4036, D 5431**

percent area, *n—in testing cotton with the Trash Meter*, the ratio of total area of trash on the surface of a sample of cotton to that of the area of the viewing window, expressed in a percentage of the area of the viewing window. **[D13.11] D 4604**

percent elongation, *n*—the increase in length of a specimen expressed as a percentage of the original length.. **[D13.19] D 4975**

percentage point, *n*—a difference of 1 % of a base quantity. **[D13.93] D 2495, D 2905, D 2906, D 4392**

performance property, *n—in wear testing*, any chemical or physical property of a fiber, yarn, or fabric that is evaluated during the wear-refurbishing cycles. **[D13.53] D 3181**

permanent care label, *n—as applied to textile products*, a care label that remains legible and attached to a textile product throughout its useful life. **[D13.62] D 3136, D 5489**

permanent deformation, *n*—the net long-term change in a dimension of a specimen after deformation and relaxation under specified conditions. **[D13.58] D 1774**

permeability, *n*—the rate of flow of a fluid under a differential pressure through a material. (See also **air permeability, porosity**.)

DISCUSSION—Fluid under differential pressure includes:
(*1*) Gas under differential gas pressure,
(*2*) Vapor under differential vapor pressure, and
(*3*) Water under differential hydrostatic pressure. (See also **air permeability**.) **[D13.59] D 4850**

pH, *n—in common usage*, a measure of the acidity or alkalinity of a solution, on a logarithmic scale, with neutrality represented by a value of 7, with increasing acidity represented by decreasingly smaller values, and with increasing alkalinity represented by increasingly larger values. **[D13.51] D 461, D 2165**

pick, *n*—an individual filling yarn. **[D13.59] D 3775**

pick count, *n—in woven fabrics*, the number of filling yarns per unit fabric length. **[D13.59] D 3775**

pick count, *n—in braided rope*, the number of strands rotating in one direction in one cycle length. **[D13.16] D 4268**

pick out mark, *n*—a fillingwise band or bar characterized by a chafed or fuzzy appearance. **[D13.59] D 3990**

piecing, *n*—a thick place in a spun yarn caused by poor splicing. **[D13.59] D 3990**

pile, *n—for pile yarn floor covering*, the texture surfaces composed of many tuft legs bound to a backing fabric in an orderly and repetitive array. **[D13.21] D 5251, D 5252, D 5417, D 5684**

pile, *n—in pile fabric*, the raised loops or tufts (cut loops) that form all or part of the fabric surface. (See also **cut pile floor covering** and **looped pile floor covering**.) **[D13.59] D 4850, D 4772**

pile floor covering, *n*—a pile fabric intended for use as a floor covering. The pile may be in the form of cut loops or loops, or both. Both the cut loops and the loops may vary in height. **[D13.21] D 1335**

pile height, *n—in determination of tuft height*, a measurement that uses a small graduated ruler inserted until it touches the backing to measure the pile from the top surface of the primary backing to the top of the tuft. **[D13.21] D 5684, D 5823**

pile lay, *n—in floor covering*, the direction in which most of

the pile fibers lean in the original, uncrushed carpet. **[D13.21] D 5251, D 5252, D 5417, D 5684, D 6119, D 6540**

pile lifting, *n*—the process of raising the pile on a textile. **[D13.62] D 5253**

pile retention, *n*—*in corduroy*, the degree to which cut-pile yarns are held secure and intact during wear. **[D13.59] D 4685**

pile reversal, *n*—a persistent change in the direction of pile lay in certain areas, resulting in an apparent visual difference of shade. (Syn. **watermarking, pooling, shading**) **[D13.21] D 2401**

pile thickness, *n*—*in pile yarn floor covering*, the difference in the unextended height of the tuft elements above the backing measured as the difference between two parallel plates exerting a specified compression on the pile and backing and on the backing with the pile removed. **[D13.21] D 5684, D 5823**

pile yarn floor covering, *n*—a textile product in which yarn or yarn segments are attached intermittently to a backing fabric to project above the backing fabric and form pile, in the form of cut loops or loops, or both, with the yarn entering the backing fabric substantially perpendicular to the plane of the backing fabric.(Syn. **cut pile, cut pile floor covering, cut-loop pile, level pile, loop pile, loop pile floor covering, multilevel pile**) **[D13.21] D 1335, D 2646, D 2859, D 3936, D 4269, D 5251, D 5252, D 5417, D 5684, D 5823, D 5848, D 6119, D 6283, D 6540**

pile yarn mass, *n*—*for back coated pile yarn floor covering*, the mass per unit area of pile yarn. **[D13.21] D 5684, D 5848**

pilling resistance, *n*—resistance to the formation of pills on the surface of a textile fabric. **[D13.60] D 4970, D 3511, D 3512, D 3514**

pills, *n*—bunches or balls of tangled fibers which are held to the surface of a fabric by one or more fibers. (Compare **fuzz ball.**) **[D13.60] D 4970, D 3511, D 3512, D 3514, D 3990**

pin lock slider, *n*—a slider that incorporates a projection on the pull that fits between adjacent interlocking elements of a zipper when a pin lock slider is in the locked position. **[D13.54] D 2050**

pin mark, *n*—a series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding device on a pin tenter frame. (See also **clip mark.**) **[D13.59] D 3990**

pinhole, *n*—*in fabrics*, a very small hole, approximately the size of the cross section of a pin. **[D13.59] D 3990**

pinked seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, which produces a zigzagged cut raw edge. (Compare **stitched and pinked seam-finish**.) **[D13.53] D 4965**

pitch, *n*—*for woven pile floor covering*, the number of binding sites in 27 in. (686 mm) of width. **[D13.21] D 418, D 5684**

plain braid, *n*—*in rope*, a braided construction in which one strand of one direction of rotation about the axis of the rope passes over one strand of the opposite direction. (See **braided rope**.) **[D13.16] D 4268**

plain seam, *n*—a seam formed by a single joining line. (Ant. **complex seam**.) **[D13.53] D 4965**

plain weave, *n*—a fabric pattern in which each yarn of the filling passes alternately over and under a yarn of warp and each yarn of the warp passes alternately over and under a yarn of the filling. **[D13.59] D 4850**

plaited rope, *n*—rope made from eight strands arranged in four pairs in which one strand is placed adjacent to a second in each pair and in which each strand of each pair has been twisted in one direction while each strand in each alternate pair has been twisted in the opposite direction and the four pairs of strands are intertwined maypole fashion in a manner such that each pair of strands passes over and under adjacent pair of strands. **[D13.16] D 4268**

pleat, *n*—three layers of fabric involving two folds or reversals of direction; the back fold may be replaced by a seam.

DISCUSSION—Pleats may be either pressed to give sharp creases or left unpressed to give soft folds. **[D13.59] D 4850**

plied yarn duck, *n*—duck fabric with plied yarns in both warp and filling. (See **flat duck**.) **[D13.59] D 4850**

plumage, *n*—the outgrowth of fowl, consisting of feathers and down (waterfowl) or feathers only (nonwaterfowl). **[D13.61] D 4523, D 4524**

plumules, *n*—downy waterfowl plumage with underdeveloped soft and flaccid quill with barbs indistinguishable from those of down. **[D13.61] D 4253**

pocket, *n*—*in zippers*, the cavity of an element designed to receive the head. **[D13.54] D 2050**

pneumatic tire, *n*—a hollow tire that becomes load-bearing upon inflation with air, or other gas, to a pressure above atmosphere. **[D13.19] D 885, D 5591**

Poisson distribution, *n*—the distribution which has as its probability function:

$$P(r) = e^{-\mu}\mu^{r}/r! \qquad (3)$$

where:

$P(r)$ = probability of obtaining exactly r occurrences of an event in one unit, such as a unit of time or area,
μ = both mean and variance of distribution, and
e = base of natural logarithms.

[D13.93] D 4686

polymer, *n*—a macromolecular material formed by the chemical combination of monomers having either the same or different chemical composition. **[D13.58] D 4466**

polyolefin, *n*—any long-chain synthetic polymer composed of at least 85 % by weight of ethylene, propylene, or other olefin units (monomers), except amorphous (non-crystalline) polyolefin qualifying under Rubber 1, as defined by the Federal Trade Commission. (Compare Olefin) **[D13.58] D 3218**

polyolefin-material cleanliness, *n*—the degree to which a polymer melt is free of filterable particles which remain insoluble in the melt under the specified test condition. **[D13.58] D 3218**

polyolefin monofilament, *n*—*as used in this specification* D 3218, a flat single filament of the slit-film type, which can

function as a yarn in commercial textile operations. **[D13.58] D 3218**

porosity, *n*—the ratio of the volume of air or void contained within the boundaries of a material to the total volume (solid matter plus air or void) expressed as a percentage. (See also **air permeability** and **permeability.**)

DISCUSSION—Porosity accordingly equals:

$$(V \times 100)/T \quad (4)$$

where:
V = volume of voids, and
T = total volume.

[D13.59] D 4850

powder cleaner, *n*—a cleaning agent in which an absorbent compound is the principal ingredient. See **absorbent compound**. **[D13.62] D 5253**

practice, *n*—a definitive procedure for performing one or more specific operations or functions that does not produce a test result. **[D13.92] D 4270, D 4392, D 5251, D 5252, D 5417, D 6119**

precision, *n*—the degree of agreement within a set of observations or test results obtained as directed in a test method. **[D13.93] D 2905, D 2906, D 4697, D 4854, D 4855**

precision, *n—under conditions of single-operator precision*, the single-operator-laboratory-sample-apparatus-day precision of a method; the precision of a set of statistically independent observations all obtained as directed in the method and obtained over the shortest practical time interval in one laboratory by a single operator using one apparatus and randomly drawn specimens from one sample of the material being tested. **[D13.93] D 2905, D 2906**

precision, *n—under conditions of within-laboratory precision with multiple operators*, the multi-operator, single-laboratory-sample, single-apparatus-day (within-operator) precision of a method; the precision of a set of statistically independent test results all obtained in one laboratory using a single sample of material and with each test result obtained by a different operator, with each operator using one apparatus to obtain the same number of observations by testing randomly drawn specimens over the shortest practical time interval. **[D13.93] D 2905, D 2906**

precision, *n—under conditions of between laboratory precision*, the multi-laboratory, single-sample, single-operator-apparatus-day (within-laboratory) precision of a method; the precision of a set of statistically independent test results all of which are obtained by testing the same sample of material and each of which is obtained in a different laboratory by one operator using one apparatus to obtain the same number of observations by testing randomly drawn specimens over the shortest practical time interval. **[D13.93] D 2905, D 2906**

precondition, *v*—to bring a sample or specimen of a textile material to a relatively low moisture content (approximate equilibrium in an atmosphere between 3 and 25 % relative humidity) prior to conditioning in a controlled atmosphere for testing. **[D13.51] D 1776**

preservation, *n*—action taken to retard or prevent deterioration of or damage to cultural objects. **[D13.53] D 5038**

pressed-in crease, *n*—a sharp crease inserted intentionally in a fabric usually by application of pressure, heat, and moisture. **[D13.59] D 4850**

pressing, *n—in the care of textiles*, a process of smoothing and shaping by heat and pressure, with or without the presence of steam. **[D13.62] D 3136**

pressing and finishing, *n*—this term takes into account all of the industrial pressing and finishing treatments used in garment production. **[D13.56] D 3562, D 3778, D 3780, D 3781, D 3782, D 3995, D 4119, D 4154**

press-off, *n—in knitted fabric*, a condition in which the yarn fails to knit and either the fabric falls off the needles or the design is distorted or incomplete. **[D13.59] D 3990**

pressure, *n*—the force exerted to a surface per unit area.

DISCUSSION—Pressure may be expressed in any appropriate or specified units, such as pascals (PA), newtons per square meter (N/m^2), or pounds-force per square inch (psi). **[D13.59] D 1777**

pretension, *n*—the specified tension applied to a specimen preparatory to making a test. **[D13.58] D 4848**

pretreat, *vt*—preapplication of cleaning agent to spots, stains, and areas of high soil concentration to maximize activation time and therefore facilitate soil removal during overall cleaning. **[D13.62] D 5253**

primary backing, *n—for tufted pile yarn floor covering*, the fabric through which the pile yarn is carried by needles to form tufts; the backing fabric. **[D13.21] D 2646, D 5684, D 5793, D 6283**

primary sampling unit, *n*—the sampling unit containing all of the sources of variability which should be considered in acceptance testing; the sampling unit taken in the first stage of selection in any procedure for sampling a lot or shipment. (See **lot sampling unit**.) **[D13.93] D 2258, D 3333, D 4271**

probability function, *n—of a discrete variate*, the mathematical expression which gives the probability that a variate will take a particular value. **[D13.93] D 4686**

probability function, *n—of a continuous variate*, the mathematical expression whose definite integral gives the probability that a variate will take a value within the two limits of integration. **[D13.93] D 4686**

probability level, *n*—a general term that reflects the stated proportion of times an event is likely to occur. (Compare to *confidence level* and *significance level*.) **[D13.93] D 2906**

process average, *n*—for the items produced, the true and unknown level of (*1*) the fraction of nonconforming items or (*2*) a characteristic of the items as determined by a specific test method. **[D13.93] D 4271, D 4392**

producer's risk, *n*—the probability of rejecting a lot when the process average is at the acceptable quality level or AQL. **[D13.93] D 3777, D 4271**

production lot, *n*—that part of one manufacturer's production made from the same nominal raw material under essentially the same conditions and designed to meet the same specifications. **[D13.93] D 2258, D 4271**

professional care, *n—for consumer textile products*, cleaning and maintenance procedures requiring the services of a person specially trained and skilled in their use. **[D13.62] D 3136, D 5253**

protrusion, *n—in fabrics*, a general term for a visible group of

fibers, a yarn, or a yarn segment that extends above the fabric surface. **[D13.59] D 5362 D 3939**

psychrometer, *n*—a variety of hygrometer comprising a dry bulb temperature indicator and a wet bulb temperature indicator which is cooled to the wet bulb temperature by the spontaneous evaporation of moisture. **[D13.51] D 4920**

puckering, *n—in bonded, fused, or laminated fabrics*, a wavy, three-dimensional effect typified by closely spaced wrinkles, on either the face fabric or the backing fabric, or both. **[D13.54] D 2724, D 3135**

pull, *n*—a group of fibers grasped by the forceps at one time and drawn from the specimen in the combs. **[D13.11] D 1440**

pull, *n—in zippers*, a part connected to a zipper slider by which the slider is operated. **[D13.54] D 2050**

pulled wool, *n*—wool taken from the pelt of a slaughtered sheep and which has not been commercially scoured. **[D13.13] D 1576, D 2462, D 4845**

QD—abbreviation for quick disassembly zipper. (See **releasing stop**.) **[D13.54] D 2050**

QR—abbreviation for quick release zipper. (See **releasing stop**.) **[D13.54] D 2050**

quadratic integrator, *n—in textile unevenness testing*, an integrator that operates continuously and reports unevenness for the time during which it has been active, giving equal weight consideration to all portions of the input. **[D13.58] D 1425**

quill, *n—in feathers*, the stem or central shaft. **[D13.61] D 4523**

quill feathers, *n*—feathers which are over 100 mm (4 in.) in length or which have a quill point exceeding 9.5 mm (6/16 in.) in length. **[D13.61] D 4523**

quill point, *n—in feathers*, the section of quill extending beyond the section of barb attachment. **[D13.61] D 4523**

quill shaft, *n—in feathers*, the section of quill from which the barbs emanate. **[D13.61] D 4523**

quilt, *n*—a bedcovering assembly used primarily for warmth, consisting of an insulating filler secured between two layers of fabric, but generally lighter in weight and thinner than a comforter. **[D13.63] D 4721**

rack, *n—in warp knitting*, a unit of length measure consisting of 480 courses. **[D13.59] D 4850**

rack length, *n—in warp knitting*, the length of the fabric produced by knitting one rack, measured on the machine under operating take-up tension.

DISCUSSION—Rack length is usually expressed in "inches-per-rack" (IPR). **[D13.59] D 4850**

radian, *n*—the plane angle between two radii of a circle which intersects the circumference of the circle making an arc equal in length to the radius. **[D13.58] D 3108, D 3412**

raised fiber surface, *n—in textile fabrics*, intentionally lifted fibers or yarns such as pile, napped, tufted, flocked, or similar surfaces. **[D13.52] D 1230**

random cause, *n*—one of many factors which contribute to variation but which are not feasible to detect and identify since they are random in origin and usually small in effect. **[D13.93] D 4467**

random sampling, *n*—the process of selecting units for a sample of size *n* in such a manner that all combinations of *n* units under consideration have an equal or ascertainable chance of being selected as the sample. **[D13.93] D 4271, D 4854**

randomized block experiment, *n*—a kind of experiment which compares the averages of *k* different treatments that appear in random order in each of *b* blocks. **[D13.93] D 4853**

ratch-setting by number *(L1 % N)***,** *n*—the basis for setting roll spacing in the drafting zone, namely, the length exceeded by 1 % of the number of fibers in a test specimen. **[D13.11] D 5332**

ratchet lock slider, *n*—a slider with a locking mechanism that permits the slider to slip along the chain upon application of a predetermined force so as to prevent damage that would impair either the service or use of either the slider or chain. **[D13.54] D 2050**

rating, *n*—a quantitative or qualitative scale for evaluation of a specific property. **[D13.53] D 3181**

raveled strip test, *n—in fabric testing*, a strip test in which the specimen is cut wider than the specified testing width and an approximately even number of yarns are removed from each side to obtain the required testing width. **[D13.60] D 5035**

raw cotton, *n*—ginned lint that has not been subjected to any textile manufacturing process. (See also **ginned lint**.) **[D13.11] D 2253, D 2495**

raw wool, *n*—wool or hair of the sheep in the grease, pulled, or scoured state. **[D13.13] D 584, D 1060, D 1334, D 1576, D 2462,**

R_d and b, *n—for the purpose of this test method for color*, the daylight color of opaque cotton specimens represented by points in a space as described by Hunter in terms of three color scales: reflectance, R_d, and the chromaticity coordinates for redness or greenness, $+a$ and yellowness or blueness, $+b$. **[D13.11] D 4605**

recoverable elongation (*CE***),** *n—of rope*, elongation which may be reclaimed after a period of relaxation after the rope was cyclic tensioned. **[D13.16] D 4268**

recycled wool, *n—as defined in the Wool Products Labeling Act as amended in 1980*, "the resulting fiber when wool has been woven or felted into a wool product which, without ever having been utilized in any way by the ultimate consumer, subsequently has been made into a fibrous state, or the resulting fiber when wool or reprocessed wool has been spun, woven, knitted, or felted into a wool product which, after having been used in any way by the ultimate consumer, subsequently has been made into a fibrous state." **[D13.13] D 1294, D 1574, D 1576, D 2462, D 2475**

reed mark, *n—in woven fabrics*, a crack between groups of warp ends, either continuous or at intervals. **[D13.59] D 3990**

reference standard, *n—in cotton testing*, a homogeneous lot of cotton having a known or accepted value for one or more physical properties. **[D13.11] D 3025**

reference tension, *n*—a low tensile force, generally about 1 %

of the rope breaking strength, and used for initial rope tension determination. **[D13.16] D 4268**

refraction, *n*—the deflection from a straight path undergone by a light ray in passing obliquely from one medium (as air) into another (as glass) in which its velocity is different. **[D13.51] D 276**

refractive index (index of refraction), *n*—the ratio of the velocity of radiation (as light) in the first of two media to its velocity in the second as it passes from one into the other. **[D13.51] D 276**

refurbish, *v—as applied to textile products*, to brighten or freshen up and restore to wearability or use by cleaning such as drycleaning, laundering, or steam cleaning. **[D13.62] D 1908, D 3136, D 3938, D 4852**

reinforced seam, *n—in sewn seams*, a seam that includes an additional layer of material on the face or back side of the seam allowance.

DISCUSSION—The added material is used to strengthen the seam and delay failure of the seam beyond the minimal acceptable limits and so enable the specimen to pass a specified cyclic impact test. **[D13.59] D 4033**

reinforcing cord, *n*— a cord made from industrial yarns and used to provide added support to other materials, such as tires, hose, belting, protective coverings, webbing, etc. **[D13.19] D 4776**

rejection number, *n—in acceptance sampling*, the minimum number of nonconforming items in a sample that requires the conclusion that the lot does not conform to specification. **[D13.93] D 3777, D 4271**

relative humidity, *n—of air*, the ratio of the pressure of water vapor present to the pressure of saturated water vapor at the same temperature. (See **absolute humidity, humidity**.) **[D13.51] D 4920**

releasing slider, *n—in zippers*, a slider with a mechanical means for loosening the slider on the chain. **[D13.54] D 2050**

releasing stop, *n—in zippers*, a device attached at or near the top of the stringer on the separable pin side which limits the travel of the slider at the open end of the chain under normal closing operations. **[D13.54] D 2050**

replicate, *n—in experimenting or testing*, one of two or more runs with the same specified experimental or test conditions and with each experimental or test condition being established independently of all previous runs. (Compare **duplicate.**) **[D13.93] D 4853**

replicate, *v—in experimenting or testing*, to repeat a run so as to produce a replicate. (Compare **duplicate.**) **[D13.93] D 4853**

residual elongation (*RE*), *n—of rope*, elongation after cyclic tensioning the rope to a specified force for a specified period of time. **[D13.16] D 4268**

residual torsion, *n*—revolutions made by a specified length of steel tire cord when one end is held in a fixed position and the other is allowed to turn freely. **[D13.19] D 2969**

residue, *n—for plumage*, quill pith, quill fragments, trash, or foreign matter. **[D13.61] D 4523**

resilience, *n*—that property of a material to recover to approximately its original size and shape after deformation. (See also **Annex A3**.) **[D13.59] D 4850**

resin bonded batting, *n*—a textile filling material which is stabilized by spraying it with an acrylic, polyvinyl acetate, or other suitable resin emulsion after which the batting is dried and cured. **[D13.61] D 4770**

resistance to delamination, *n—for pile yarn floor covering*, the force/unit width measured when separating component layers **[D13.21] D 3936, D 5684**

resistance to slippage, *n*—the force required to separate the parts of a standard seam by a specified amount. **[D13.59] D 434**

resistance to ultraviolet radiation, *n—in polyolefin tape yarn*, the time-to-failure of yarns exposed to xenon-arc weathering. **[D13.58] D 3218**

resistance to yarn slippage, *n*—the force required to separate the parts of a standard seam by a specified amount. **[D13.59] D 4034, D 4159**

resistance to yarn slippage, *n—at the seam*, the force required to displace one or more yarns in a fabric from the original position, causing differences in alignment, or spacing, or both. **[D13.59] D 434, D 4033**

resorption, *n*—the process by which a material that has given material by desorption takes up some more of the material given up. **[D13.51] D 2654, D 4920**

response time, *n—in tensile testing machines*, the time required by the indicating or recording device to reflect an instantaneous change in force, usually 0 to 90 % of full scale. **[D13.58] D 76**

restoration, *n*—action directed towards returning the condition of an object to its original state. **[D13.53] D 5038**

resultant yarn number, *n*—the yarn number based on the observed mass per unit length of a plied yarn, a cabled yarn, or a yarn whose number has been changed by processing such as twisting or bulking. **[D13.58] D 1244**

retainer pin, *n—in zippers*, a tube-like element, similar to the separable pin, attached over the bead at the bottom end of the stringer opposite to the separable pin and that is designed to hold the fixed retainer in position. **[D13.54] D 2050**

retraction, *n—in yarns and cords*, the reduction in length when previous restraint is removed and relaxation is allowed, thus causing a directionally proportional increase in linear density. **[D13.19] D 5591**

retting, *n—in flax*, the process of partial biological or chemical decomposition of pectins and other components which bind the fiber, fiber bundles, and the non-fiber structures, thereby facilitating removal of bast fibers from stems.

under-retting, n—in flax, indicates that decomposition is insufficient to allow fiber bundles to be easily removed from the non-fibrous parts of the stem.

over-retting, n—in flax, indicates that decomposition has caused excessive deterioration of bast fibers. **[D13.17]**

ribbon, *n*— a fine-textured, narrow fabric which weighs less than 510 g/m^2(approximately 2.6 lb/100 yd per inch of width or 15 oz/yd^2) and which is used primarily for trimming or decorative purposes. (See also **narrow fabric**.)

DISCUSSION—Usually ribbons are woven fabrics less than 4 in. (100 mm) wide. **[D13.59] D 4850**

ring, *n—in buttons*, a split ring used to fasten a staple attached button to the substrate. **[D13.54] D 5497**

ring, *n—in hosiery*, a narrow, visually different horizontal band. **[D13.59] D 3990**

rod cast button, *n*—a button fabricated from a disc sliced or sawed from a cast rod of formulated styrene modified polyester resin. **[D13.54] D 5497**

rolled seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, in which both raw edges are enclosed by rolling to one side and hand stitching close to the seam line. **[D13.53] D 4965**

rope, *n*—a compact and flexible, generally torsionally balanced continuous structure, greater than 4-mm (5⁄32-in.) diameter capable of applying or transmitting tension between two points. **[D13.16] D 4268**

rope mark, *n—in dyed or finished fabrics*, a long irregularly shifting longitudinal mechanically induced streak. **[D13.59] D 3990**

roping, *n*—a term used for roving in the woolen system of spinning. **[D13.13] D 4845**

rotary extraction cleaning, *n*—a cleaning procedure which uses a rotating brush machine or a series of rotating jets through which shampoo is fed or sprayed into the carpet pile and simultaneously removed by suction. **[D13.62] D 5253**

rotary shampoo, *n*—a cleaning procedure which uses a rotating brush machine through which shampoo is fed into the pile of a textile floor covering. See also **rotary extraction cleaning**. **[D13.62] D 5253**

rotation cast button, *n*—a button fabricated from a disc blanked from a partially polymerized sheet formed in a rotating cylinder. **[D13.54] D 5497**

rotor, *n—in open-end spinning machines*, a device resembling a centrifuge, in which the fibers are assembled and in which, by virtue of its rotation, real twist is inserted in the forming yarn. **[D13.58] D 3888**

rotor-type open-end spinning machine, *n*—an open-end spinning machine wherein the assembly of individual fibers and the insertion of real twist are effected by a rotor. (See also **open-end spinning machine**.) **[D13.58] D 3888**

rough, *adj*—a descriptive term for a fabric surface which has the feel of sandpaper. **[D13.59] D 3990**

routine maintenance, *n—in textile cleaning*, superficial daily or weekly cleaning to remove particulate soil and dust. **[D13.62] D 5253**

rove, *n—in jute processing*, a continuous strand of spun-jute fiber having a spyndle number of 50 or greater. **[D13.16] D 681**

roving, *n*—a loose assemblage of fibers drawn or rubbed into a single strand, with very little twist. In spun yarn systems, the product of the stage, or stages, just prior to spinning. **[D13.58] D 4120**

roving, *n—in glass textiles*, a multiplicity of filaments or yarns gathered together into an approximately parallel arrangement without twist. **[D13.18] D 578, D 4389**

rubber, *n*—a material that is capable of recovering from large deformations quickly and forcibly, and can be, or already is, modified to a state in which it is essentially insoluble (but can swell) in boiling solvent, such as benzene, methylethyl ketone, and ethanol-toluene azeotrope. **[D13.19] D 1871, D 4393, D 4776, D 4777**

rubber compound, *n—as used in the manufacture of rubber articles*, an intimate mixture of elastomer(s) with all the materials necessary for the finished article. **[D13.19] D 1871, D 2229, D 4393, D 4776, D 4777**

rubberize, *v*—to impregnate or coat with rubber compound or both. **[D13.19] D 4393**

rug, *n*—a textile floor covering of limited area which is complete in itself and is intended for use as a partial covering of a floor or another floor covering. **[D13.21] D 5684**

ruggedness test, *n*—an experiment in which environmental or test conditions are deliberately varied to evaluate the effect of such variations. **[D13.93] D 4853, D 4855**

run, *n—in experimenting or testing*, a single performance or determination using one of a combination of experimental or test conditions. **[D13.93] D 4853**

run, *n—in knitted fabrics*, a series of dropped stitches. (See **dropped stitch.**) **[D13.59] D 3990**

run, *n—in the American woolen system*, the number of 1600-yd lengths of yarn per pound; an indirect yarn numbering system generally used for yarns spun on the woolen system. **[D13.58] D 1059, D 2260**

rupture, *n*—the breaking or tearing apart of a material. (Compare **failure.**) **[D13.58] D 4848**

sample, *n*—(*1*) a portion of a lot of material which is taken for testing or for record purposes.

(*2*) a group of specimens used, or observations made, which provide information that can be used for making statistical inferences about the population(s) from which the specimens were drawn. (See also **lot sample, laboratory sample,** and **specimen**) **[D13.93] D 2258, D 2525, D 2906, D 3333, D 3777, D 4271, D 4845, D 4854**

sample skein, *n*—skein reeled from the package or beam of the laboratory sample, and used in the laboratory as a source of specimens. **[D13.58] D 2258**

sampling plan, *n*—a procedure for obtaining a sample. **[D13.93] D 4854**

sampling plan result, *n*—the number obtained for use in judging the acceptability of a lot when applying a sampling plan. **[D13.93] D 4854**

sampling unit, *n*—an identifiable, discrete unit or subunit of material that could be taken as part of a sample. **[D13.93] D 2258, D 3333, D 3777, D 4271**

sampling unit, *n—in wool*, a portion of material that is taken at one time from one physical location and that is combined with similar portions to make up the laboratory sample. **[D13.13] D 2525, D 4845**

sanforizing mark, *n*—a crimped, rippled, wavy, pebbled, or cockled place in the cloth showing distortion of the texture. **[D13.59] D 3990**

scalloped selvage, *n*—an abrupt, narrow indentation in the selvage. **[D13.59] D 3990**

scatter rug, *n*—a small rug which is designed to be flexible and is usually cleaned by laundering. **[D13.62] D 5253**

scoured wool, *n*—wool from which the bulk of impurities has been removed by an aqueous or solvent washing process.

[D13.13] D 1575, D 1576, D 2462

scutching, *n*—the mechanical beating and scraping of flax straw subsequent to breaking to separate the shives and tow from the long line flax fiber. **[D13.17]**

scye depth, *n—in body measurements*, the distance from the cervicale to a point level with the armpit. **[D13.55] D 5219**

sealant-sealed seam finish, *n—in home sewing*,a seam finish in which a clear liquid seam-sealant is used as the treatment to prevent fraying. **[D13.53] D 4965**

seam, *n*—a line where two or more fabrics are joined, usually near the edge. (Syn. *joining line*. See also **sewn seam, glued seam, stapled seam, thermally bonded seam**.) **[D13.53] D 4965**

seam allowance, *n—in sewn fabrics*, the distance from the edge of a fabric to the parallel stitch line furthest from that edge. **[D13.54] D 1683, D 1908, D 3940, D 4965**

seam assembly, *n*—the composite structure obtained when fabric(s) are joined by means of a seam. **[D13.54] D 1683, D 1908, D 3940**

seam damage, *n—in sewn fabrics*, an adverse change in the physical condition of one or more of the components in a seam which would reduce the seam acceptability such as yarn slippage, needle damage, or fabric rupture. **[D13.54] D 1683**

seam damage, *n—in sewn fabrics*, any change in the physical condition of one or more of the components in a seam which reduces seam efficiency. **[D13.54] D 1908**

seam efficiency, *n—in sewn fabrics*, the ratio of seam strength to fabric strength. **[D13.54] D 1683**

seam engineering, *n—in sewn fabrics*, the procedures used to select a specific combination of sewing thread, stitch type, seam type, and stitch density to achieve the maximum sewn seam strength for a particular fabric type. **[D13.54] D 1683**

seam failure, *n—in sewn fabrics*, that point at which an external force (1) ruptures the sewing thread, (2) ruptures the fabric, (3) causes excessive yarn slippage adjacent to the stitches, or (4) causes any combination of these unacceptable conditions. **[D13.54] D 1683**

seam-finish, *n*—a treatment of the raw fabric edges of the seam allowance in a plain seam. **[D13.53] D 4965**

seam interaction, *n—in sewn fabrics*, the net effect of the relationship between the combination of fabric, seam type, stitch type, and stitch density on seam efficiency. **[D13.54] D 1683**

seam mark, *n—in finished cloth*, a pressure mark caused by the thickness of the seam being pressed against the cloth. **[D13.59] D 3990**

seam slippage, *n—in sewn fabrics*, the displacement of the fabric yarn parallel and adjacent to the stitch line. **[D13.54] D 1683**

seam type, *n—in sewn fabrics*, an alphanumeric designation relating to the essential characteristics of fabric positioning and rows of stitching in a specified sewn fabric seam. **[D13.54] D 1683, D 1908, D 3940**

secondary backing, *n—for pile yarn floor covering*, a suitable material adhered to or adhered to the underside of the primary backing fabric. **[D13.21] D 1335, D 2646, D 3936, D 5251, D 5252, D 5417, D 5684, D 6119**

second-hand filling material, *n*—an industry product which contains any filling material which has previously been used should not be offered for sale unless a clear and conspicuous disclosure of that fact is made on the label thereof and in all advertising and invoices relating to such product. **[D13.61] D 4523**

section mark, *n—in woven fabrics*, warp bands of different color, texture, or luster. **[D13.59] D 3990**

seed coat fragment, *n—in cotton*, a portion of a cotton seed, usually black or dark brown in color, broken from a mature or immature seed, and to which fibers and linters may or may not be attached. **[D13.11] D 2496, D 4604**

seed cotton, *n*—cotton, as harvested and before ginning, consisting of seeds with the fibers attached and usually including measurable amounts of foreign matter. **[D13.11] D 2495**

self-bound seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, in which one seam allowance encloses both raw edges. **[D13.53] D 4965**

self-extinguishing, *adj*—not defined; the Board of Directors of ASTM has ruled that the term "self-extinguishing" shall not be used in ASTM standards. It has no meaning except in association with a specific test method or specific conditions of burning. **[D13.92] D 4391**

selvage, *n*—the woven edge portion of a fabric parallel to the warp.

DISCUSSION—The selvage usually has an increased number of ends per inch. **[D13.59] D 4850**

selvage mark, *n—in finished cloth*, a lengthwise crease mark along the selvage caused by an edge being folded or doubled. **[D13.59] D 3990**

semi-restraint, *adj*—of or relating to a method of mounting that allows an object a limited degree of movement (for example, contraction or expansion of a fabric). **[D13.52] D 3659**

sensitivity, *n—in electronic systems*, the minimum change in the input signal that produces a change in the output signal that can be reliably measured. **[D13.58] D 76**

sensitivity, *n—in mechanical systems*, the smallest change that can be induced on a material by the system and be reliably measured. (See also **least count**.) **[D13.58] D 76**

sensitivity criterion, *n*—a quantitative measure of the relative merit of two test methods, that combines the estimated variance of each method with the ability of the method to measure differences in the property of interest. **[D13.93] D 4270**

sensitivity ratio, SR, *n—in comparing two test methods*, the ratio of the sensitivities of the test methods with the large sensitivity in the numerator. **[D13.93] D 4855**

separable pin, *n—in zippers*, a tube-like element attached over the bead at the bottom end of one stringer. **[D13.54] D 2050**

separable zipper, *n*—a zipper fitted with special components at the bottom of the chain, so as to permit complete disengagement and then reengagement of the two stringers.

(Compare **nonseparable zipper**.) **[D13.54] D 2050**

separate-element zipper, *n*—a zipper consisting of two series of separately formed elements, each attached to one of the opposing edges of two tapes which are engaged and disengaged by the movement of a slider. (Compare **continuous element zipper**.) **[D13.54] D 2050**

separator, *n*—a component of some open-end spinning machines located inside the rotor to direct the incoming fibers to the slide surface. **[D13.58] D 3888**

set mark, *n*—a stop mark resulting from a prolonged loom shut-down. **[D13.59] D 3990**

sew, *v*—to unite or fasten with stitches. **[D13.58] D 204**

sew-through flange button, *n*—a button that has two or more holes in its flange for passage of a needle and thread so that the button can be attached to a flexible substrate. **[D13.54] D 5171, D 5497**

sew through flange button, *n*—a button attached to one part of a flexible substrate by means of a needle and thread passed through two or more holes in its flange and through the substrate. (Compare **sew-through shank button**). **[D13.54] D 5497**

sew through shank button, *n*—a button attached to one part of a flexible substrate by means of a needle and thread passed through a hole or loop in the intergral shank and through the substrate. (Compare **sew-through flange button).** **[D13.54] D 5497**

sewing force, *n*—the force applied to a sewing thread at the needle eye during penetration of a material by the needle. **[D13.58] D 204**

sewing hole, *n*—*in buttons*, a hole in either the flange or shank used to attach the button to the substrate by means of a needle and thread. **[D13.54] D 5497**

sewing machine, *n*—*in home sewing*, a machine that uses needles and bobbin threads in the stitch formation and is primarily for home sewing use rather that industrial use. **[D13.53] D 5646**

sewn seam, *n*—*in sewn fabrics*, a juncture at which two or more planar structures such as textile fabrics, are joined by sewing, usually near the edge. **[D13.54] D 1683, D 1908, D 3940, D 4033, D 4965**

sewn seam strength, *n*—*in sewn fabrics*, the maximum resistance to rupture of the junction formed by stitching together two or more planar structures. **[D13.54] D 1683**

sewing thread, *n*—a flexible, small-diameter yarn or strand, usually treated with a surface coating, lubricant, or both, intended to be used to stitch one or more pieces of material or an object to a material. **[D13.58] D 204, D 3693, D 3823, D 4030**

shading coefficient, *n*—the ratio of the solar heat gain through a glazing system under a specific set of conditions to the solar gain through a single light of double-strength sheet glass under the same conditions. **[D13.18] D 4028**

sham, *n*—a fabric covering for a bed pillow, usually of decorative fabric that matches the bedcovering. **[D13.63] D 4721**

shampoo, *n*—a solution of detergent in water formulated for specialized cleaning tasks. **[D13.62] D 5253**

shear strength, *n*—the resistance to forces that cause, or tend to cause, two contiguous parts of a body to slide relatively to each other in a direction parallel to their contact. **[D13.54] D 5169**

sheath, *n*—*in feathers*, a covering at the quill point end of nestling feathers or nestling down which holds the barbs together. **[D13.61] D 4523**

sheath-core, *adj*—a descriptive term for a multicomponent textile fiber consisting of a continuous envelope which encases a continuous, central, internal region. **[D13.58] D 4466**

sheer, *n*—a fabric that is transparently thin or diaphanous. **[D13.56] D 3691, D 4038, D 4117, D 4156, D 4234, D 4235**

sheet, *n*—*in textiles*, a large rectangular usually plain woven fabricated product which is used over a mattress on a bed. The product may be carded or combed yarn in a wide range of constructions. **[D13.63] D 5431**

sheet blanket, *n*—a thin blanket of cotton or cotton and synthetic blend having a nap on both sides. **[D13.63] D 4036**

sheet cast button, *n*—a button fabricated from a disc blanked from a cast sheet of formulated styrene-modified polyester resin. **[D13.54] D 5497**

shier, *n*—*in woven fabrics*, fine fillingwise cracks randomly distributed across the fabric width. (Compare **let-off mark** and **crack mark.**) **[D13.59] D 3990**

shiner, *n*—a streak, usually short, caused by a lustrous section of a filament yarn. **[D13.59] D 3990**

shipment, *n*—goods or commodities which are transported together as a unit; a quantity of product for which a bill of lading has been signed by the carrier. **[D13.58] D 2494**

Shipping unit, *n*—*in textiles*, any type of packaging used to facilitate the handling and shipping of fibers, yarns and fabrics.

DISCUSSION—Packages can include bales, cartons, and other such containers. **[D13.58] D 3333**

shives, *n*—the woody parts of the flax plant which are not fibers. **[D13.17]**

shoe fold, *n*—a fabric folded from both ends into twelve or sixteen folds to the piece, the length of the fold depending upon the length of the piece. (Compare **book fold**.) **[D13.59] D 4850**

shorn pile, *n*—pile that is removed when the face pile is sheared. **[D13.21] D 5684**

short-fiber content (SFC), *n*—that percentage of fibers (by number or by weight) in a test specimen, that is shorter than 12.5 mm (0.5 in.) in length. **[D13.11] D 5332**

shoulder, *n*—*in zippers*, the bearing surface of an interlocking element by which the chain is contained inside the flanges of the slider. **[D13.54] D 2050**

shoulder circumference, *n*, *in body measurements*, with arms down at sides, the maximum distance around the shoulders at the top of the arm. **[D13.55] D 5219**

shoulder joint, *n*—*in anatomy*, the junction of the collarbone and the shoulder blade. (See also **acromion**.) **[D13.55] D 5219**

shoulder length, *n*—*in body measurements*, the distance from

the side neck base to the armscye line at the shoulder joint. **[D13.55] D 5219**

shoulder slope, *n—in body measurements*, the angle formed when the slant of the shoulder line deviates from the horizontal line that originates at the side neck base. **[D13.55] D 5219**

shower curtain, *n*—a hanging fabric used to prevent water spillage from a shower area. **[D13.63] D 5378**

shrinkage, *n*—a decrease in one or more dimensions of an object or material. **[D13.58] D 204, D 461, D 2102, D 2259, D 2646, D 3218, D 3692, D 4391, D 5104, D 5684**

shuttle mark, *n—in woven fabrics*, a fine fillingwise line caused by damage to a group of warp yarns by shuttle abrasion. **[D13.59] D 3990**

significance level, α, *n*—the stated upper limit for the probability of a decision being made that a hypothesis about the value of a parameter is false when in fact it is true. (See **confidence level, probability level**.) **[D13.93] D 2906, D 4392**

simple machine stitch pattern, *n—in home sewing*, a repeating segment of machine stitches, with each repeat consisting of one or more stitches long. (Compare **complex machine stitch pattern**.) **[D13.53] D 5646**

single-level pile, *adj—in floor coverings*, having all pile tufts at the same level. **[D13.21] D 418**

single sampling, *n—in acceptance sampling*, a sampling plan for which the decision to accept or reject a lot is based on a single sample. **[D13.93] D 3777**

single stitch zigzag, *n—in home sewing*, a simple machine stitch pattern made by the needle moving up and down and alternately from one side to the other while the fabric moves through the feed mechanism in either the forward or reverse direction with all segments having equal length. **[D13.53] D 5646**

single-strand breaking force, *n—in tensile testing*, the breaking force of one strand that follows a specified path, usually a straight line, between the clamps of a tensile testing machine. **[D13.58] D 4848**

single twist, *n*—the amount of twist in each individual single yarn element in a tire cord structure based on the length of the element after twist has been removed from the cord. **[D13.19] D 885, D 885M**

single yarn, *n*—the simplest strand of textile material suitable for operations such as weaving, knitting, etc. **[D13.58] D 1422, D 1423**

sitting spread, *n—in body measurements*, the circumference of the widest part of the hips with the subject seated. **[D13.55] D 5219**

sizing, *n*—a generic term for compounds which, when applied to yarn or fabric, form a more or less continuous solid film around the yarn and individual fibers. (See also **filler**.)

DISCUSSION—**Sizing varieties** include:

(*a*) *Sizing*—Applied to warp yarn to bind the fibers together and stiffen the yarn.

(*b*) *Dope*—Applied to crepe yarn to set the twist and assist creping.

(*c*) *Dressing*—Applied to sewing thread to bind the strands together and leave a pliable yarn.

Varieties applied to fabric include:

(*a*) *Sizing*—Applied to fabrics to improve their physical properties such as mass, stiffness, and so forth.

(*b*) *Dope*—Applied to airplane fabrics to make them taut and to balloon fabrics to make them less permeable to gases.

(*c*) *Dressing*—Applied to fabrics to produce a glazed, lustrous effect. (Compare **filler**.) **[D13.59] D 4850**

sizing system, *n—in garment construction*, a method of designating garment sizes. **[D13.55] D 5219**

skein, *n*—a continuous strand of yarn, wound on a hand or motorized reel. **[D13.58] D 1578, D 1907, D 2692**

skein break factor, *n—in yarn testing*, the comparative breaking force of a skein of yarn adjusted for the linear density of the yarn expressed in an indirect system; the product of the breaking force of the skein and the yarn number expressed in an indirect system. **[D13.58] D 1578**

skein breaking tenacity, *n*—the skein breaking load divided by the product of the yarn number in a direct numbering system and the number of strands placed under tension. **[D13.58] D 1578**

skein loop-length, *n*—the inside length of a coil of yarn mounted vertically as measured under a specified force. **[D13.58] D 2259**

skein shrinkage, *n*—a measure of true or intrinsic yarn shrinkage not including crimp contraction. **[D13.58] D 4031**

skein strength, *n*—the force required to rupture a skein of yarn, expressed in units of force, as breaking force. **[D13.58] D 1578**

skew, *n*—a fabric condition resulting when filling yarns or knitted courses are angularly displaced from a line perpendicular to the edge or side of the fabric.

DISCUSSION—Knitted courses or filling yarns usually appear as straight lines at right angles to the edge or side of the fabric. When tubular knitted fabric is finished, differential skew may occur on the top and bottom part of the tube. **[D13.60] D 3882, D 3990**

slack end, *n*—a warp yarn woven under insufficient tension. **[D13.59] D 3990**

slack pick, *n*—a single filling yarn woven under insufficient tension. **[D13.59] D 3990**

slack selvage, *n*—slack ends in the fabric edge. **[D13.59] D 3990**

slam-off, *n—in woven fabrics*, a distortion due to the entrapment of the filling carrier in the shed. **[D13.59] D 3990**

sleeving, *n*—braided, knitted, or woven fabric of cylindrical form having a width less than 100 mm (4 in.) (circumference less than 200 mm (8 in.). (See also **tubing**.) **[D13.18] D 581**

sley, *n*—the number of warp ends per 25 mm (1 inch) of fabric width, exclusive of selvage. **[D13.59] D 4850**

slide surface, *n—in the rotor of an open-end spinning machine*, that part of the internal surface of the rotor on which the fibers are deposited and are caused to slide to the collecting surface. **[D13.58] D 3888**

slider, *n—in zippers*, the part that opens a zipper when it is moved in one direction and closes the zipper when it is moved in the opposite direction. **[D13.54] D 2050**

slipcover, *n*—a removable, fitted protective textile cover, often decorative and specifically made for upholstered furniture.

(See **furniture covering.**) **[D13.63] D 4852**

sliver, *n*—a continuous strand of loosely assembled fibers that is approximately uniform in cross-sectional area and without twist. **[D13.58] D 1282, D 4120**

sliver knitted fabric, *n*—a single-jersey fabric in which untwisted staple fibers are knitted in at each loop to form a pile surface on the technical back of the jersey structure. **[D13.56] D 3655**

slot seam, *n*—a complex seam formed on the inside of the object, having a decorative seam underlay slightly visible from the face side held in place by two visible rows of stitching. **[D13.53] D 4965**

slough-off, *n—in woven fabrics*, a defect caused by several coils of yarn slipping off the filling bobbin simultaneously and being woven into the fabric in a group. **[D13.59] D 3990**

slub, *n*—an abruptly thickened place in a yarn. (See **lump, piecing, slough-off, slug**. Compare **cockles**) **[D13.58] D 2255, D 3990**

slug, *n—in raw silk*, a thickened place several times the diameter of the yarn, 3 mm (⅛ in.) or over in length. **[D13.59] D 3990**

smash, *n—in woven fabrics*, a relatively large hole characterized by broken warp ends and floating picks. (Compare **slam-off**) **[D13.59] D 3990**

smoldering, *n*—the combustion of a solid material without accompaniment of flame but generally with the production of smoke. (See also **afterglow** and **glow**.) **[D13.92] D 4391**

snag, *n—in fabrics*, a yarn or part of a yarn pulled or plucked from the surface.

DISCUSSION—For the purpose of test methods D 3939 and D 5362 a snag is created when an object pulls, plucks, scratches, or drags a group of fibers, a yarn, or a yarn segment from its normal pattern. Snags can be classified into three types: (1) snags that have a protrusion and no distortion, (2) snags that have a distortion and no protrusion, and (3) snags that have both a protrusion and a distortion. Other changes in appearance, such as color contrasts, should be reported because they affect the visibility of a protrusion or a distortion. **[D13.59] D 3939, D 3990, D 5362**

snagging resistance, *n—in fabrics*, the property of a fabric whereby yarns or parts of yarns are prevented or inhibited from being pulled or plucked from the surface. **[D13.59] D 3939, D 5362**

snap action, *n*—the force required to disengage a snap fastener resulting from a pull exerted perpendicular to the plane of material to which the snap fastener is attached. **[D13.54] D 4846**

snap fastener, *n*—a device for attaching one material to another consisting of matching male and female parts, each of which is attached to a separate material so that the parts can be joined by a low compressive force and separated by a low perpendicular tensile force. **[D13.54] D 4846**

soap, *n*—a cleaning agent usually consisting of sodium or potassium salts of fatty acids. **[D13.62] D 3136, D 5253**

soft window coverings, *n*—curtains, draperies, or other accessories on wall or window openings that are either lined or unlined and primarily constructed of textile fabrics. **[D13.63] D 4720**

softness, *n—in water*, the relative absence of dissolved calcium, magnesium, and other salts that react with soluble soaps to form insoluble precipitates. (Compare **hardness**.) **[D13.53] D 5429**

soiling, *n—for pile yarn floor covering*, a process by which dirt and other foreign material becomes attached to the surface pile causing a change in appearance. **[D13.21] D 5684, D 6540**

solar screening, *n—of coated fiber glass yarn solar screening*, a woven fabric that imparts a shielding or protection from light, heat, wind, and insects without excessive alteration or impairment of visual viewing, and that has a mesh in excess of 12 by 12 in. with a rib pattern in the warp direction formed by the weaving of two or more contiguous yarns with a minimum of space between such yarns followed by space equivalent to the width of one or more of the yarns in the rib. **[D13.18] D 4028**

solid braid, *n—in rope*, a braided construction in which each strand alternately passes under and over one or more of the other strands while all strands are rotating around the axis with the same direction of rotation. **[D13.16] D 4268**

solvent, *n*—any liquid used to dissolve another material. **[D13.62] D 5253**

solvent relative humidity, *n*—the humidity of air over a drycleaning bath and in equilibrium with the solvent and its small amount of water. **[D13.62] D 2724, D 3136**

sorption, *n*—the process of taking up or holding a material by adsorption or absorption, or both. **[D13.51] D 4920**

sour, *v—in refurbishing textiles*, to neutralize the alkalinity of a material after cleaning by using a weak acid such as acetic acid or an acid-forming salt. **[D13.62] D 5253**

span length, *n—in length testing of cotton with the Fibrograph*, the distance spanned by a specified percentage of the fibers in the test beard, taking the amount reading at the starting point of the scanning as 100 %. **[D13.11] D 1447, D 3817**

specialty felt, *n*—one of a number of special purpose felt structures available for, but not limited to, a specific end-use application. **[D13.13] D 2475**

specific area, *n—of wool*, the ratio of the fiber surface to fiber volume. **[D13.13] D 1282**

specific gravity, *n—of felt*, the relative mass per unit volume of felt expressed as a percentage of the mass per unit volume of water. **[D13.13] D 2475**

specification, *n*—a precise statement of a set of requirements to be satisfied by a material, product, system, or service that indicates the procedures for determining whether each of the requirements is satisfied. **[D13.92] D 123, D 3777**

specimen, *n*—a specific portion of a material or a laboratory sample upon which a test is performed or which is selected for that purpose. **[D13.93] D 1441, D 2258, D 2525, D 2905, D 2906, D 3333, D 4371, D 4845, D 4854**

specimen clamp, *n*—the device which is used to transport the fiber test beard of cotton through the gathering, combing, brushing, length, length uniformity, strength, and elongation measurement operations. **[D13.11] D 4604**

specimen loader, *n*—an instrument which obtains the test specimen by lowering an open specimen clamp onto the surface of the raw cotton samples, closing the jaws of the specimen clamp and ascending with a portion of the fibers retained in the jaws awaiting the combing and brushing procedure. **[D13.11] D 4604**

specks, *n—in woolen fabrics*, small pieces of undyed vegetable matter which can be removed by carbonizing or can be covered by dyeing or inking. **[D13.59] D 3990**

specular gloss, *n*—the relative luminous fractional reflectance of a specimen in the specular direction. (See **gloss**.) **[D13.58] D 3218**

split-stitch, *n—in knitted fabrics*, a stitch in which one part of the yarn is knit and the other part is dropped. **[D13.59] D 3990**

splitting resistance, *n—of felt*, the force required to overcome the interfacial strength of a material and specifically to separate a felt into two layers (of approximately equal thickness). **[D13.13] D 461**

spot, *n*—a small discolored area on, or in, a fabric. **[D13.59] D 3990**

spot and stain removal, *n*—a cleaning procedure for localized areas with cleaning agents and mechanical action specific to the removal of the foreign substances present. **[D13.62] D 3136, D 4852**

spot clean, *n*—to remove spots and stains by treating them with cleaning agens and mechanical actions specific to the fiber, fabric, product type, and the foreign material present **[D13.63] D 5253**

sport shirt, *n—for boys*, a shirt made in numerical sizes, designed for informal wear and may be worn with or without a jacket. **[D13.61] D 4231**

sport shirt, *n—for men*, a shirt designed for informal wear and made with body sizes such as small, medium, or large; they may be worn with or without a jacket. **[D13.61] D 4231**

spun yarn, *n—in a staple system*, a continuous strand of fibers held together by some binding mechanism. **[D13.58] D 1422, D 1423**

spyndle number, *n—in jute*, a direct yarn-numbering system for jute rove and jute yarns in which the number of pounds per spyndle, or 14 400-yd (13 167-m) length, is expressed as pounds per spyndle. (See also **direct yarn numbering system.**) **[D13.16] D 681**

stability to thermal oxidation, *n—for polyolefin monofilaments*, the time-to-failure, when polyolefin monofilaments exposed to circulating air, at 125°C. **[D13.58] D 3218**

stable fabric, *n*—a fabric, the dimensions of which do not change significantly during processing or use.

DISCUSSION—A stable fabric is also a fabric that does not change significantly with multiple passes through measuring devices. **[D13.60] D 3773**

stain, *n*—an area of discoloration that penetrates the fabric surface. **[D13.59] D 3990, D 5426**

standard atmosphere for preconditioning, *n—in textiles*, an atmosphere having a relative humidity of 5 to 25 %, ±2 % tolerance for the selected relative humidity, and a temperature of not over 50°C (122°F), with± 1°C (±2°F) tolerance for the selected temperature and used to partially dry the material before further treatment or conditioning. **[D13.51] D 1776, D 4920, D 4966**

standard atmosphere for testing, *n*—an atmosphere for testing in which the conditions for relative humidity and temperature are specified and controlled. (Compare atmosphere for testing). **[D13.51] D 4920**

standard atmosphere for testing, *n—in textiles*, an atmosphere for testing in which the air is maintained at a relative humidity of 65 ± 2 % and at a temperature of 21 ± 1°C (70 ± 2°F). (See **atmosphere for testing**.) **[D13.51] D 1776, D 2654, D 3374, D 4604, D 4920, D 5427**

standard atmosphere for testing textiles,, *n*—laboratory conditions for testing fibers, yarns, and fabrics in which air and relative humidity are maintained at specific levels within established tolerances. **[D13.19] D 2970**

standard deviation, *s, n—of a sample*, a measure of the dispersion of variates observed in a sample expressed as the positive square root of the sample variance. **[D13.93] D 2905, D 4853**

standard moisture regain, *n*—the moisture regain of a material at equilibrium with the standard atmosphere for testing textiles. (See **moisture regain**.) **[D13.51]**

standard polyolefin monofilament, *n—as used in this specification*, a flat polyolefin strand, approximately 0.05 mm (2 mil) thick by 2.5 mm (100 mil) wide and oriented with a draw ratio between 5:1 and 7:1. **[D13.58] D 3218**

staple, *n*—natural fibers or cut lengths from filaments. **[D13.58] D 3513**

staple, *n—in grease wool*, a tuft or lock of fibers which naturally cling together, as found in a fleece. **[D13.13] D 1234**

staple glass yarn, *n*—yarn made from filaments that are nominally 200 to 380 mm (8 to 15 in.) in length. **[D13.18] D 578**

staple length, *n—in grease wool*, the length of a staple obtained by measuring the natural staple without stretching or disturbing the crimp of the fibers. **[D13.13] D 1234**

stapled seam, *n*—a seam formed by shaped metal devices such as U-shaped staples. (Compare **glued seam, sewn seam**.) **[D13.53] D 4965**

state of statistical control, *n*—a condition in which a process, including a measurement process, is subject only to random variation. **[D13.93] D 4271, D 4467**

static friction, *n*—friction developed between two touching bodies at the time one body starts to move relative to another. (Compare **kinetic friction**.) **[D13.58] D 3108**

static force, *n—in textile testing*, a mass which exerts a force by means of the mass alone without motion. (Syn. dead load) **[D13.58]**

statistic, *n*—a quantity that is calculated from observations on a sample and that estimates a parameter of a population. **[D13.93] D 4855**

status switches, *n*—switches located on the mainframe electronic chassis in the console used to set the number of specimens tested on each laboratory sample and turn off instruments not being used in operating the system. **[D13.11] D 4604**

steel cord, *n*—a formed structure made by twisting together

two or more steel filaments when used as an end product or a combination of strands or filaments and strands. **[D13.19] D 2969, D 4393**

steel cord wrap, *n*—a filament wound helically around a steel cord. **[D13.19] D 2969**

steel filament, *n*—the individual element in a steel strand or cord. **[D13.19] D 2969**

steel strand, *n*—a group of steel filaments combined together to form a unit product. **[D13.19] D 2969**

stick-slip, *n*—a phenomenon occurring when boundary lubrication is deficient, manifested by alternate periods of sticking and slipping of the surfaces in contact. **[D13.58] D 3412**

stiffness, *n*—resistance to bending. **[D13.60] D 1388, D 4032**

stiffness, *n—with regard to circular bending of textiles*, resistance to multidirectional bending. **[D13.60] D 4032**

stitch, *n—in sewing*, the configuration of the interlacing of sewing thread in a specific repeated unit. (See **stitching, stitch type**) **[D13.54] D 204, D 1683, D 1908, D 3940**

stitch, *v—in making rubberized articles*, to press uncured rubber compound into or around yarns or cords to form a composite of the materials and to remove entrapped air. **[D13.19] D 4393**

stitch density, *n—in sewn seams*, the number of stitches per unit length in one row of stitching in the seam. **[D13.54] D 1683, D 1908, D 3940**

stitch gage, *n—in sewn seams*, the perpendicular distance between adjacent parallel rows of stitching. **[D13.54] D 1683, D 1908, D 3940**

stitch type, *n*—a numerical designation relating to the essential characteristics of the interlacing of sewing thread(s) in a specified seam in sewn fabric. **[D13.54] D 3940**

stitch type, *n—in sewn seams*, a numerical designation relating to the essential characteristics of the interlacing of sewing thread(s) in a specified stitch. **[D13.54] D 204, D 1683, D 1908**

stitched and pinked seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, in which each raw seam allowance edge is machine stitched and then cut to a zigzag raw edge. (Compare **pinked seam-finish**.) **[D13.53] D 4965**

stitches, *n—in tufted pile floor covering*, the number of pile tufts per inch in the lengthwise direction. **[D13.21] D 5684, D 5793, D 6283**

stitching, *n*—a series of stitches embodied in a material or materials of planar structure such as woven textile fabrics, usually for ornamental purposes or finishing an edge, or both. **[D13.54] D 204, D 1908**

stock in process, *n—in textiles*, staple fibers at any stage of manufacture between the opening of the bale and the completion of the spinning process. **[D13.11] D 2495**

stop, *n—in a zipper*, the device at the top and bottom of chain or stringer that prevents the slider from leaving the chain. **[D13.54] D 2050**

stop mark, *n*—a visible change in the density of the weave across the width of the fabric caused by the tension on the warp not being adjusted properly after the loom has been stopped. (See **set mark**) **[D13.59] D 3990**

straight stitch, *n—in home sewing*, a simple machine stitch pattern of straight, single stitch segments of equal length. The simple machine stitch pattern is formed by the down and up movement of the needle while the fabric moves through the feed mechanisms in either the forward or reverse direction. **[D13.53] D 5646**

straightness, *n—in steel cord*, the property of a cord characterized by a lack of deviation from its central axis over short lengths of a cord. **[D13.19] D 2969**

strain, *n*—deformation of a material caused by the application of an external force. (See also **tensile strain**.) **[D13.58] D 4848**

strand, *n*—(1) a single fiber, filament, or monofilament, (2) an ordered assemblage of textile fibers having a high ratio of length to diameter and normally used as a unit, including slivers, rovings, single yarns, plied yarns, cords, braids, ropes, etc. **[D13.58] D 578, D 1425, D 4849**

strand, *n—in fiber rope*, an ordered assemblage of textile yarns used to make fiber rope. **[D13.16] D 4268**

strand, *n—in braided rope*, one of a number of similar units which are intertwined to produce a braided rope, each unit consisting of one or more yarns which are not twisted together and which follow a prescribed path through the braided rope. **[D13.16] D 4268**

strand irregularity, *n—in textiles*, variation in a property along a strand. **[D13.58] D 1425**

straw, *n—in flax*, refers to dried stems and plant parts such as roots, leaves, and seed holding structures. **[D13.17]**

streak, *n*—an extended unintentional stripe of narrow width, often a single yarn. **[D13.59] D 3990**

strength, *n*—the property of a material that resists deformation induced by external forces. (Compare **force.**) **[D13.58] D 1578, D 4848**

strength analyzer, *n*—an instrument which determines tensile strength and elongation at breaking load for a test beard of cotton. **[D13.11] D 4604**

strength at rupture, *n*—strength expressed in terms of the force at rupture. (Compare **breaking strength.**) **[D13.58] D 4848**

stress, *n*—the resistance to deformation developed within a material subjected to an external force. **[D13.58] D 76, D 4848**

stress-strain curve, *n*—a graphical representation of the stress and strain relationship of a material under conditions of compression, shear, tension, or torsion. (Compare **force-deformation curve, force-elongation curve,** and **force-extension curve.**) **[D13.58] D 4848**

stretch stitch, *n—in home sewing*, a complex machine stitch pattern or of various combinations of straight stitch, single stitch zigzag, or multiple stitch zigzag. It is produced by coordinated motions of needle and feed as the fabric moves through the feed mechanism in the forward or reverse direction. **[D13.53] D 5646**

stretch woven fabric, *n*—a woven fabric which is capable of at least 20 % stretch in either warp or filling direction, or both, under forces and conditions encountered in use, and of almost complete recovery after removal of the force.

DISCUSSION—There are currently two main classes of woven stretch fabrics:

(*1*) Fabrics which rely more on force of recovery than on stretch for their utility. This class includes most of the woven elastic fabrics containing 15 % or more elastomer. These fabrics are sometimes referred to as power stretch fabrics.

(*2*) Fabrics which rely more on stretch than on force of recovery for their utility. This class includes most of the woven elastic fabrics containing less than 15 % elastomer, most woven fabrics containing stretch yarns, and many other woven fabrics with built-in stretch characteristics. These fabrics are sometimes referred to as comfort stretch fabrics.

The term stretch fabric is sometimes applied to knitted and other types of fabrics which are capable of high stretch and recovery. **[D13.59] D 3787 D 4850**

stringer, *n—in zippers*, the tape, bead, and element assembly that constitutes one side of a chain. **[D13.54] D 2050**

stripper, *n—in textiles*, a product, usually the reducing agent, that changes the coloring material dye, or soil stain to reduced color. (See also **bleach** **[D13.62] D 5253**

strip test, *n—in fabric testing*, a tensile test in which the full width of the specimen is gripped in the clamps. **[D13.60] D 5035**

stubble, *n—in shorn floor covering*, the portion of the pile that remains after shearing. **[D13.21] D 5684**

stubble height, *n*—the distance the stubble extends above the backing fabric. **[D13.21] D 5684**

stuffer yarn, *n*—an extra backing yarn running in the warp direction through a woven pile floor covering. **[D13.21] D 418**

sturdy pretreatment procedure, *n—in textile conservation*, the washing, rinsing, drying, and ironing actions followed when backing fabrics are medium to heavy weight. (Compare **delicate pre-treatment procedure**.) **[D13.53] D 5429**

sulfar fiber—see **sulfar** in Annex A1.

sum of squares, *n—in analysis of variance*, a contraction of the expression ''sum of the squared deviations from the appropriate average(s)'' where the average(s) of interest may be the average(s) of a specific subset(s) of data or of the entire set of data. **[D13.93] D 4854**

supported needled felt, *n*—a needled felt that is composed entirely of fibers physically interlocked and reoriented in combination with interlay, scrim, or foundation of knitted, stitched, bonded, or extruded structure. **[D13.13] D 461, D 2475**

surface contour, *n*—divergence of a surface from planeness rough (high) to smooth (low). (See also Annex A3.) **[D13.59] D 4850**

surface friction, *n*—resistance to slipping offered by surface harsh (high) to slippery (low). (See also Annex A3.) **[D13.59] D 4850**

surface water absorption, *n—by a fabric*, the process of removing liquid water from a surface such as human skin, dishes, or furniture. **[D13.59] D 4772**

swimwear, *n*—textile garments intended for wear in fresh, chlorinated, or salt water. **[D13.56] D 3994, D 3996**

systematic sampling, *n*—the process of selecting units in a sample in accordance with a specific order or location in time or space, or both. **[D13.93] D 4271**

tabby sample, *n*—the section of tire cord fabric between two tabbies that have been woven separately with a distance of 0.5 to 1.0 m (18 to 36 in.) between them. **[D13.19] D 885, D 2970/D 2970M**

tack, *n—for rubber or rubber compounds*, a property that causes two layers of these materials, when pressed together, to adhere at the area of contact. **[D13.19] D 4393**

tack tear, *n*—the measurement of the resistance of a coated fabric to tearing under conditions simulating an installation that has been tacked in place. **[D13.56] D 3690**

tacking cut, *n*—small holes or cuts along the selvage. **[D13.59] D 3990**

tag, *n*—a paper item, such as ticket or slip, which is marked to provide information to the consumer at the time of purchase, which is permanently affixed to the product. **[D13.62] D 3136**

take-up, *n—in fabrics*, the difference in distance between two points in a yarn as it lies in a fabric and the same two points after the yarn has been removed from the fabric and straightened under a specified tension, expressed as a percentage of the straightened length. **[D13.59] D 3883**

take-up rollers, *n—in open-end spinning machines*, a pair of closely set, continuously rotating cylinders which withdraw the spun yarn from the rotor. **[D13.58] D 3888**

tangent modulus, *n*—the ratio of change in stress to change in strain derived from the tangent to any point on a stress-strain curve. **[D13.58] D 3822, D 4848**

tape, *n—in textiles*, a narrow fabric with a mass per unit area of less than 0.5 kg/m^2(0.1 lb/ft^2) for each 25.4 mm (1 in.) of width and which is used primarily for utilitarian purposes. (See also **narrow fabric** and **textile ribbon**.) **[D13.18] D 580**

tape, *n—in zippers*, a strip of material along one edge of which the bead and elements are attached. **[D13.54] D 2050**

tape ends, *n—in zippers*, the tape extending beyond the stops at either or both ends of the stringers. **[D13.54] D 2050**

tape yarn, *n*—a yarn of a flat, tape-like character produced by slitting an extruded film. **[D13.58] D 3218**

tare, *n*—the mass of all external and internal packing materials (including bobbins, tubes, etc.) of a case, bale, or other type of container. **[D13.58] D 2494**

tear drop, *n—in woven fabrics*, short elliptical deviations of one or more adjoining picks. **[D13.59] D 3990**

tear resistance, *n—in fabrics*, the resistance to a tearing force. **[D13.60] D 1424**

tearing energy, *n*—the work done in tearing a material. **[D13.60] D 1424**

tearing force, *n*—the average force required to continue a tear previously started in a fabric. **[D13.64] D 5735**

tearing force, *n—in fabric*, the force required either (*1*) to start or (*2*) to continue or propagate a tear in a fabric under specified conditions. **[D13.60] D 1424, D 2261, D 2262, D 5587**

tearing strength, *n—in fabrics*, the capacity of a material to withstand the ultimate tearing force required to propagate a tear after its initiation. **[D13.60] D 1424 D 2261 D 5587**

tearing strength, *n*—the force required either *(1)* to start or *(2)* to continue or propagate a tear in a fabric under specified

conditions. **[D13.60] D 2261, D 2262, D 5587**

temple mark, *n—in woven fabrics*, small holes or distortions adjacent to the selvage. **[D13.59] D 3990**

tenacity, *n—in a tensile test*, the force exerted on the specimen based on the linear density of the unstrained material. **[D13.58] D 1224, D 1294, D 1445, D 2101, D 2256, D 2524, D 3217, D 3822, D 4120, D 4604, D 4848**

tenacity at rupture, *n*—the tenacity at the force-at-rupture. (See also **force-at-rupture, rupture, tenacity.**) **[D13.58] D 4848**

tenacity-at-specified-elongation, TASE, *n*—the tenacity of a material at its force-at-specified-elongation. (Compare **breaking tenacity.**) **[D13.58] D 885, D 885M, D 4848**

tensile, *adj*—relating to tension in, or on, a material. **[D13.58] D 4848**

tensile hysteresis curve, *n*—a complex load-elongation or stress-strain curve obtained under either of two conditions:

(*1*) When a specimen is successively subjected to the application of a load or force less than that causing rupture, and the removal of the load or force according to a predetermined procedure.

(*2*) When a specimen is stretched less than the breaking elongation and allowed to relax by removal of the strain according to a predetermined procedure. **[D13.58] D 4848**

tensile strain, *n*—the strain on a material subjected to tension. **[D13.58] D 4848**

tensile strain recovery, *n*—the percent of recoverable extension to the total extension impressed on a fiber under specified conditions. **[D13.58] D 1774, D 4848**

tensile strength, *n*—the strength of a material under tension as distinct from compression, torsion, or shear. **[D13.13], [D13.19] D 885, D 1294, D 1319, D 2974**

tensile strength, *n*—the strength shown by a specimen subjected to tension, as distinct from torsion, compression, or shear. **[D13.58] D 1445, D 4604**

tensile strength, *n*—the breaking load (or force) per unit cross-sectional area of the unstrained specimen. **[D13.13] D 1294**

tensile strength, *n*—the strength of a material under tension as distinct from compression, torsion or shear. **[D13.58] D 4848**

tensile stress, *n*—the stress within a material subjected to tension. **[D13.58] D 4848**

tensile test, *n—in textiles*, a test in which a material is extended in one direction to determine one or more of its force-extension, or stress-strain, characteristics; for example, breaking force, elongation at break. **[D13.58] D 4848**

tensile testing machine, *n*—an apparatus designed to impart, or transmit, force/extension, or stress/strain, to a material and to measure the effect of the action. (See also **constant-rate-of-extension tensile testing machine, constant-rate-of-load tensile testing machine,** and**constant-rate-oftraverse tensile testing machine**.) **[D13.58] D 76**

tension, *n*—a uniaxial force tending to cause the stretching of a material. **[D13.59] D 4848**

tension, *n*—a uniaxial force tending to cause the stretching of a material. **(D13.59) D 1775, D 3107, D 4848, D 4964**

tension-recovery chart, *n—in tension testing*, a continuously plotted graph of tension versus extension resulting from a tension-recovery cycle. (Compare **extension-recovery chart**. See also **extension-recovery cycle** and **tension-recovery cycle**.) **[D13.59]**

tension-recovery cycle, *n—in tension testing*, the continuous application of tension on a specimen with a momentary hold at the maximum tension, followed by return to zero tension at a controlled rate. Compare **extension-recovery cycle**.) (See also **extension-recovery chart load-recovery cycle** and **tension-recovery chart**.) **[D13.59]**

tension-supported roof, *n*—a fabric roof-system, that is properly secured and primarily held in place by tensile forces applied across the system.**[D13.59] D 4851**

tension test, *n—in textiles*, a test designed to measure the tautness of a textile strand or fabric. (See also **tensile test**.) **[D13.59] D 4848**

tenter mark, *n*—a visible deformation on the side edge or body of a fabric due to pressure from clips or pins. (See **clip mark, pin mark.**) **[D13.59] D 3990**

terry fabric, *n*—a fabric with a woven warp pile or a knitted pile, with uncut loops on a single side or uncut loops on both sides, and which is used for such products as toweling, beachwear, and bathrobes. **[D13.59] D 4390, D 4772**

terry towel, *n*—a textile product with end hems or fringes and side hems or selvages which is made with loop pile on one or both sides generally covering the entire surface or forming strips, checks, or other patterns. **[D13.63] D 5433**

test beard, *n—in length testing of cotton*, the portion of the test specimen that has been combed and brushed into a“ beard” which protrudes from the outside of the comb(s) or the clamp(s). **[D13.11] D 1447, D 3817, D 4604, D 4605, D 5332**

test method, *n*—a definitive procedure for the identification, measurement, and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result. (Compare **practice**.) **[D13.92] D 123, D 4270, D 4392, D 4467, D 4697**

test result, *n*—a value obtained by applying a given test method, expressed as a single determination or a specified combination of a number of determinations. (See **observation**.) **[D13.93] D 2905, D 2906, D 4271, D 4854**

test skein, *n*—a small skein which has a prescribed length of yarn and is used for the determination of linear density or breaking force, or both. **[D13.58] D 76**

test specimen, *n—(Fibrograph)*, the cotton fibers placed randomly on a pair of Fibrograph combs for fiber length measurements. **[D13.11] D 1447**

test specimen, *n—in cotton length tests with the Length Analyzer*, the cotton fibers protruding randomly from the base of a Motion Control Inc. specimen clamp for fiber length measurement before being combed or brushed. **[D13.11] D 4604**

test specimen, *n—in cotton maturity tests*, the series of slides observed by one technician as one half of the test. **[D13.11] D 1442**

test specimen, *n—for wool top*, a length of specified mass

taken at random from a length of wool top selected as a laboratory sample. **[D13.13] D 1770**

tex, *n*—the unit of linear density, equal to the mass in grams of 1000 meters of fiber, yarn, or other textile strand, that is used in a direct yarn numbering system. (See also **linear density** and **direct yarn numbering system**.) **[D13.58] D 204, D 861, D 1059, D 1577, D 2260**

textile, *n*—originally a woven fabric, now generally applied to: (*1*) staple fibers and filaments suitable for conversion to or use as yarns, or for the preparation of nonwoven fabrics, (*2*) yarns made from natural or manufactured fibers, (*3*) fabrics and other manufactured products made from fibers as defined above, and from yarns, and (*4*) garments and other articles fabricated wholly from one or more of the above elements, and articles made principally from the above when the products retain the characteristic flexibility and drape of the original fabrics. **[D13.92] D 629**

textile, *adj*—of or pertaining to textiles. **[D13.92] D 123**

textile fiber, *n—general*, a generic term for the various types of matter that form the basic elements of textile fabrics and other textile structures. **[D13.92] D 123**

DISCUSSION—Typical commercial fibers include elongated single-cell seed hairs such as cotton and kapok; elongated, multicellular structures such as wool or hair; aggregates of elongated cells such as flax, jute, or sisal; continuous filaments or short lengths of filaments of organic materials such as silk, rayon, nylon, acrylic, and polyester; and fibers consisting of inorganic materials such as glass, asbestos, and metal. (See also Annex A1 and Annex A2.)

textile fiber, *n—specific*, a unit of matter that is characterized by having a length at least 100 times its diameter or width and which can be spun into a yarn or made into a fabric by interlacing in a variety of methods, including weaving, knitting, braiding, felting, and twisting. **[D13.92] D 123**

textile floor covering, *n*—a system having a use-surface composed of textile material and generally used for floor covering. **[D13.21] D 5684**

texture, *n*—the surface appearance and hand of a textile.

DISCUSSION—Texture is independent of the color of the **textile**. **[D13.59] D 4850**

texture, *n—in pile yarn floor coverings*, in the case of pile yarn floor coverings, the detailed configuration of loops, cut pile ends, and individual fibers in the pile. **[D13.21] D 5251, D 5252, D 5417, D 5684, D 6119**

textured glass yarn, *n*—a yarn processed from continuous filament yarn in such a manner to induce bulk to the yarn by disorientation of the filaments. **[D13.18] D 578**

thermal blanket, *n*—a blanket woven so that cells or openings are created in the fabric so that air warmed by the body is trapped between the yarns, such as textured or leno weaves; this product can be napped or unnapped. **[D13.63] D 5432**

thermal bonded batting, *n*—a textile filling material which contains low-melting point fibers or polymers which, when heated, fuse the batting materials together. **[D13.61] D 4770**

thermal character, *n*—apparent difference in temperature of the fabric and the skin of the observer touching it. (See also Annex A3.) **[D13.59] D 4850**

thermal character, *n*—that property of a fabric that makes it feel warm to the touch. **[D13.59] D 4850**

thermal conductivity, *n*—time rate of unidirectional heat transfer per unit area, in the steady-state, between parallel planes separated by unit distance, per unit difference of temperature of the planes. **[D13.51] D 1518**

thermal resistance, *n*—the reciprocal of thermal transmittance. **[D13.51] D 1518**

thermal resistivity, *n*—the reciprocal of thermal conductivity. **[D13.51] D 1518**

thermal shrinkage, *n—of textile yarns and cords*,contraction in length caused by heat **[D13.19] D 4974**

thermal transmittance, *n*—time rate of unidirectional heat transfer per unit area, in the steady-state, between parallel planes, per unit difference of temperature of the planes. **[D13.51] D 1518**

thermally bonded seam, *n*—a seam formed by heat and pressure. (Compare **glued seam, sewn seam, stapled seam**.) **[D13.53] D 4965**

thick place, *n*—a yarn defect characterized by a diameter greater than that of the adjoining segments and extending for 6 mm (¼ in.). (See also thin place.) **[D13.58] D 2255**

thick place, *n—in fabric*, an unintentional change in fabric appearance characterized by a small area of more closely spaced yarns, or by a congregation of thick yarns as compared to the adjacent construction. **[D13.59] D 3990**

thickness—the distance between one surface and its opposite.

DISCUSSION—In textiles, thickness is the distance measured between the upper and lower surfaces of the material as measured under a specified pressure. It is usually determined as the distance between an anvil or base and a presser foot used to apply the specified pressure. **[D13.59] D 1777**

thickness—the distance between one surface and its opposite; the distance between the upper and lower surfaces of the material, measured under a specified pressure. **[D13.59] D 1777**

thigh girth, *n—in body measurements*, the maximum circumference of the upper leg close to the crotch. (Compare **mid-thigh girth**.) **[D13.55] D 5219**

thin filling, *n—in woven fabrics*, a filling yarn smaller in diameter than normal. **[D13.59] D 3990**

thin place, *n*—a yarn defect characterized by a segment that is substantially (at least 25 %) smaller in diameter than the average diameter of the yarn. (See also **thick place**.) **[D13.58] D 2255**

thin place, *n—in fabric*, an unintentional change in fabric appearance characterized by a small area of loosely spaced yarns or by a congregation of thin yarns as compared to the adjacent construction. **[D13.59] D 3990**

thong hole, *n—in zippers*, the opening at the end of a pull. **[D13.54] D 2050**

thread break, *n—in sewn seams*, a mode of failure evidenced by rupture of the sewing thread.

DISCUSSION—A sewing thread break is not construed as a failure unless the test is being performed as a sewing thread analysis. **[D13.59] D 4033**

thread holder, *n*—the support package on which a sewing yarn is wound. **[D13.58] D 204, D 3693**

throats, *n—in zippers*, the two openings in a slider that receive the stringers. **[D13.54] D 2050**

throw, *n*—a removable, unfitted protective textile cover, used over upholstered furniture. (See **furniture covering.**) **[D13.63] D 4852**

ticket number, *n—in sewing thread*, the designator assigned to a sewing thread to designate its approximate linear density.

DISCUSSION—The ticket number is an indicator of the minimum amount of fiber present. The smaller the number, the finer the thread (lesser amount of fiber); and the larger the number, the coarser the thread (greater amount of fiber). This designator represents a size variation which will range from three numbers apart up to 50 numbers apart. The narrow range is important so that there is not a wide disparity in the linear density of the sizes indicated by a single designator. The wide range of numbers designate heavier (coarser) yarns where difference in yield is less of a critical factor relative to linear density. **[D13.58] D 204, D 3823**

tight end, *n—in woven fabrics*, a yarn which was woven under excessive tension or has shrunk more than a normal amount. **[D13.59] D 3990**

tight pick, *n—in woven fabrics*, a filling yarn which was woven under excessive tension or has shrunk more than a normal amount, which may cause puckering at the junction with normal picks. (Compare **wavy cloth.**) **[D13.59] D 3990**

tight selvage, *n—in woven fabrics*, selvage yarns shorter than warp yarn in the body of the fabric. **[D13.59] D 3990**

tight twist end, *n*—a single end with higher than normal twist. **[D13.59] D 3990**

time of integration, *n—in yarn evenness testing*, the time during which a point-to-point integrator stays switched on. **[D13.58] D 1425**

time-to-break, *n*—the time interval during which a specimen is under prescribed conditions of tension and is absorbing the energy required to reach maximum load. **[D13.58] D 76**

tire, *n*—a load-bearing, ground-contacting circumferential attachment to a vehicle wheel. **[D13.19] D 885, D 5591**

tire bead, *n*—that part of a tire that comes in contact with the rim and that is shaped to secure the tire to the rim. **[D13.19] D 4975**

tire bead wire, *n*—a monofilament steel wire with a metallic coating, usually bronze, used in forming a tire bead. **[D13.19] D 4975**

tire cord, *n*—a twisted or formed structure composed of two or more single or plied industrial yarn elements having the same nominal twist, direction of twist, length, and tension. **[D13.19] D 885, D 2692, D 2970, D 4776, D 4777, D 4974**

tire cord fabric, *n*—a fabric consisting of tire cord warp with widely spaced (usually 1 to 5 picks/in.) single yarn filling. **[D13.19] D 885, D 885M, D 2692, D 2970, D 4393**

tire fabric, *n*—a textile fabric, other than tire cord fabric, which is used as a reinforcement in tires. **[D13.19] D 2692**

toggle, *n—in buttons*, a clip used to fasten a staple button to the flexible substrate. **[D13.54] D 5497**

tolerances, *n—in mathematics*, prescribed limits of variation for specified properties of a particular material based on observed values obtained by specified test methods and on samples that are representative of the material. **[D13.93] D 541, D 681, D 2497, D 2644, D 2645, D 3219, D 3887, D 4855**

top, *n—in textiles, (1) worsted process*—a sliver in which the fibers have been parallelized, and usually combed; *(2) manufactured fibers or tow to top process*, a sliver obtained by drafting, along with breaking or cutting a multifilament tow. (See also wool top.) **[D13.58] D 4120**

top, *n—in wool*, a continuous untwisted strand of wool fibers from which the shorter fibers or noils have been removed by combing. **[D13.13] D 519, D 1282, D 1770, D 3992**

top stop, *n—in zippers*, a part affixed between or immediately above the interlocking elements, on either or both stringers, to prevent the slider from leaving the chain. **[D13.54] D 2050**

topstitching, *n*—a line of stitching that shows on the face side in the finished article, usually stitched while having the face side of the fabric up. **[D13.53] D 4965**

torque, *n*—a moment (of forces) which produces or tends to produce rotation or torsion. **[D13.58] D 4848**

torsion resistance, *n—in tire beadwire*, the number of turns of twist in a short length of wire that causes rupture **[D13.19] D 4975, D 6320**

total crotch length, *n—in body measurements*, the distance from the waist level at center front through the crotch to the waist level at center back. **[D13.55] D 5219**

total elongation (TE), *n*—**of rope**, the entire elongation at any given applied force. **[D13.16] D 4268**

total mass, *n—in in pile yarn floor coverings,*the mass of all matter in the mass per unit area expressed in grams per square metre (ounces per square yard) or in grams per linear metre (ounces per liner yard). **[D13.21] D 5684, D 5848**

total vertical trunk length, *n—in body measurements*, the distance from the right shoulder line midway between the neck base and the shoulder joint, down the back through the crotch and over the projection of the right breast to the starting point. **[D13.55] D 5219**

toughness, *n*—the capacity of a material to absorb energy. (Compare **work-to-break, work-to-rupture.**) **[D13.58] D 4848**

toughness at rupture, *n*—toughness of a material to breaking or tearing apart. **[D13.58] D 4848**

tow, *n—in flax fibers*, a combination of fiber bundles and ultimate fibers that have a maximum length of 50 cm.

DISCUSSION—Tow can be made during any stage of processing. For example, breaker, scutched and hackled tow are respectively created subsequent to breaking, scutching and hackling. **[D13.17]**

tow, *n*—**in manufactured fibers**, a twistless multifilament strand suitable for conversion into staple fibers or sliver, or for direct spinning into yarn. **[D13.58] D 2101**

towel, *n*—an absorbent textile product used for drying or wiping. **[D13.63] D 5433**

trammage, *n*—**in woven crepes**, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating *S* and *Z* twist. **D [13.59] D 3990**

transformation, *n*—the change from one set of variables, *x*, to another set, x', by the use of a function, $x' = f(x)$. **[D13.93] D 4686**

trash, *n*—**in cotton**, undeveloped seed, motes, small bits of seed coat, or particles of leaf appearing as specks. **[D13.11] D 3990**

trash, *n*—*in flax fiber*, any non-fibrous material. **[D13.17]**

trash, *n*—**in testing cotton with the Trash Meter**, foreign matter having a distinct difference, as seen by a video camera, between light and dark color from that of cotton. **[D13.11] D 4604**

Trash Meter, *n*—an instrument which optically measures the amount of trash on the surface of a raw cotton sample as presented to the viewing window. **[D13.11] D 4604**

trash removal device, *n*—**in open-end spinning machines**, a system for removing impurities from the opened feed stock before the fibers are conveyed to the rotor. **[D13.58] D 3888**

treatment combination, *n*—**in experimenting**, one set of experimental conditions. **[D13.93] D 4853**

tricomponent fiber, *n*—a fiber consisting of three polymers which are chemically different, physically different, or any combination of such differences. **[D13.58] D 4466**

trim, *v*—**in textiles**, to cut off a portion of a material. **[D13.53] D 4965**

tristimulus filters, *n*—**in cotton fiber color testing with the Color Meter**, optical filters used in conjunction with specific color lamps to obtain a response function approximating the tristimulus functions of the CIE Standard Observer for Source C. **[D13.11] D 4604**

true gage length, *n*—*in tensile testing*, a precise length between well-defined bench marks located on the specimen while under known tension in the unsupported portion between the holding clamps and free from contact with any snubbing surfaces or other sources which could result in nonuniform strain. **[D13.58] D 76**

true rise, *n*—**in body measurements**, the vertical distance (plumb line) from the waist level at the side to the crotch. **[D13.55] D 5219**

trunnions, *n*—**in zippers**, the two pivots at the end of the pull that fit into the bail. **[D13.54] D 2050**

t-test, *n*—a test of statistical significance based on the use of Student's *t*-distribution and used to compare two sample averages or a sample average and a hypothetical value. **[D13.93] D 4855**

tubing, *n*—braided, knitted, or woven fabric of cylindrical form having a width of 4 in. or more (circumference of 8 in. or more). (See also **sleeving**.) **[D13.18] D 581**

tuck, *n*—**in rope**, a free strand of the rope placed between the rope strands during splicing. **[D13.16] D 4268**

tucked seam, *n*—a complex seam formed on the inside of the object with neither raw edge enclosed, having one visible line of topstitching on the face side and a visible free folded edge (tuck). (Compare **lapped seam**.) **[D13.53] D 4965**

tucking defect, *n*—*in knitted fabrics*, one or more unwanted tuck loops. **[D13.59] D 3990**

tuft, *n*—*in pile yarn floor coverings*, those cut or uncut loops which form part of the fabric face that are attached or bound to the backing fabric at binding sites **[D13.21] D 418, D 1335, D 5684, D 5793**

tuft bind, *n*—*in pile fabrics*,the force required to pull a tuft element from a pile yarn floor covering. **[D13.21] D 1335, D 5684**

tuft element, *n*—*for pile yarn floor covering*, a segment of yarn bound to a backing fabric at a binding site with two portions (legs) of the yarn projecting above the backing fabric, one portion on each side of the binding site. **[D13.21] D 5684, D 5823, D 6283**

tuft height, *n*—*for pile yarn floor covering*, the length of a tuft leg. **[D13.21] D 5684, D 5823**

tuft leg, *n*—*for pile yarn floor covering*, one of the two portions of a tuft element that projects above the backing fabric on the pile side of the floor covering. **[D13.21] D 1335, D 5684, D 5823, D 6283**

tuft length, *n*—*for pile yarn floor covering*, the length of a tuft element measured while extended in a straight line under zero tension. **[D13.21] D 5684, D 6283**

tufted fabric, *n*—a fabric with a pile consisting of tufts or loops formed by inserting yarn into a previously prepared backing fabric. **[D13.59] D 4850, D 5684, D 5793**

tufting, *n*—**in upholstered furniture**, localized indentation of upholstered furniture surfaces and cushions, by the use of or appearance of buttons, providing an aesthetic treatment. **[D13.63] D 4852**

twelve-harness satin, *n*—a weave similar to eight-harness satin except in warp-faced fabrics warp yarns show on the face of the fabric eleven out of twelve adjacent yarns and in filling-faced fabrics filling yarns show on the face eleven out of twelve adjacent yarns. **[D13.18] D 579, D 4029**

twill braid, *n*—**in rope**, a braided construction in which one strand of one direction of rotation about the axis passes over two strands of the opposite direction and it in turn passes under the next two strands of opposite direction. **[D13.16] D 4268**

twill weave, *n*—a weave characterized by diagonal lines produced by a series of floats staggered in the warp direction, which are normally formed by the filling (a filling-faced twill). (See also **warp-faced twill**.) **[D13.59] D 4850**

twill weave, *n*—a weave characterized by diagonal lines produced by a series of floats staggered in the warp or filling direction. (See also **warp-faced twill** and **filling-faced twill**.)

twine, *n*—**(1)** a term applied loosely to a variety of textile strands used for tying such articles as parcels, bundles, or bales.

(2) an aggregate of fibers or yarns compacted into a partially or completely balanced twisted structure of indefinite length, generally used for tying or binding. **[D13.16] D 1233**

twist, *n*—*in textile strands*, the helical or spiral configurations induced by turning a strand about its longitudinal axis. **[D13.58] D 1422, D 1423**

twist, *n*—the number of turns about its axis per unit of length observed in a yarn or other textile strand. **[D13.58] D 204**

twist balance, *n*—**in glass fiber cord and sewing thread**, the relationship of primary and final twist to each other and to the cord size such that residual torsional effects are nullified. **[D13.18] D 4030**

twist factor, *n*—the product obtained when the twist expressed in turns per centimetre is multiplied by the square root of the yarn number expressed in tex.

$$\text{Twist factor (TF)} = \text{tpcm} \times \sqrt{T} \quad (5)$$

where:
T = yarn number expressed in tex.
[D13.58] D 1422, D 1423

twist multiplier, *TM*, *n*—the quotient of the twist expressed in turns per inch and the square root of the yarn number in an indirect system.

$$\text{Twist multiplier (TM)} = \text{tpi}/\sqrt{N} \quad (6)$$

where:
N = yarn number in an indirect system, the cotton system unless otherwise specified.
[D13.58] D 1422, D 1423

twist take-up, *n*—the change in length of a yarn or other textile strand caused by twisting, expressed as a percent of the original untwisted length. **[D13.58] D 1423**

twisted or laid rope, *n*—rope made from three or more strands which are laid or twisted together in a twist direction opposite to the twist direction in the strands. **[D13.16] D 4268**

Type A operating characteristic curve, *n*—an operating characteristic curve which describes the operation of a sampling plan where the size of the lot being sampled is taken into consideration. **[D13.93] D 3777**

Type B operating characteristic curve, *n*—an operating characteristic curve which describes the operation of a sampling plan where items are drawn at random from a theoretically infinite process. **[D13.93] D 3777**

Type I apparel—apparel designed for general heavy work; it may be subjected to breaking and tearing stresses indoors or out. **[D13.56] D 4109, D 4118**

Type II apparel—apparel designed for light work or leisure activities; it will not be expected to undergo severe physical stresses. **[D13.56] D 4109, D 4118**

typp, *n*—an obsolete indirect yarn numbering system equal to the number of 1000-yd lengths per pound. **[D13.58] D 1059, D 2260**

ultimate fiber, *n*—*in flax*, an individual bast fiber. **[D13.17]**

unbonded batting, *n*—a textile filling material which is neither needle-punched, resin bonded, or thermal bonded. (See also **needle-punched batting, resin bonded batting,** and **thermal bonded batting.**) **[D13.61] D 4770**

underarm length, *n*—*in body measurements*, with the arm down, the distance from the armpit to the inner wrist bone. **[D13.55] D 5219**

underlay, *n*—a resilient layer of material placed under rugs or carpets to increase comfort and improve service life of the carpet. **[D13.21] D 5252, D 5417, D 5684, D 6119**

underwear, *n*—clothing worn next to the skin under outer clothes. **[D13.56] D 3820**

uneven dyeing, *n*—cloth which shows variations in shade due either to incorrect dyeing methods or faulty materials. **[D13.59] D 3990**

unevenness, *n*—*in textiles*, variation in the linear density of a continuous strand or of a portion of a strand. (See also **coefficient of variation unevenness, mean deviation unevenness**.) **[D13.58] D 1425**

uniformity index, *n*—*in fiber length testing of cotton*, the ratio between the mean length and the upper-half-mean length expressed as a percentage of the upper-half-mean length. **[D13.11] D 4604, D 4605**

uniformity ratio, *n*—*in cotton length testing with the Fibrograph*, the ratio between two span lengths expressed as a percentage of the longer length. **[D13.11] D 1447**

unit length of instrument, L_c, *n*—in textile unevenness testing, the length of strand being measured between the sensing elements at any moment. **[D13.58] D 1425**

unsupported needled felt, *n*—a needled felt that is composed entirely of fibers physically interlocked and reoriented with, and of themselves without an interlay, scrim, or foundation of knitted, stitched, bonded, or extruded structure. **[D13.13] D 461, D 2475**

untreated, *n*—a descriptive term for glass fiber yarns having no applied chemicals or coatings, other than the minimal lubricant or binder used to control intra-fiber abrasion. **[D13.18] D 4030**

upholstered furniture, *n*—furniture covered with such materials as textiles or leather, and generally with padding or cushions, or both. **[D13.56] D 4771, D 4852**

upholstery cleaning instructions, *n*—any of the various letter codes supplied by the fabric manufacturer to provide acceptable cleaning methods. **[D13.62] D 5253**

upholstery fabric, *n*—the exterior fabric covering applied to a furniture unit. **[D13.56] D 4771**

upper-arm girth, *n*—*in body measurements*, the maximum circumference of the arm usually midway between the elbow and the shoulder joint. **[D13.55] D 5219**

upper-arm length, *n*—*in body measurements*, with the arm bent, the distance from the shoulder joint along the outside of the arm to the prominence of the elbow. **[D13.55] D 5219**

upper-half-mean length, *n*—*in fiber length testing of cotton*, the mean length by number, of the longer one half of the fibers by weight. **[D13.11] D 4604**

upper quartile length, *n*—*in testing of cotton fibers*, that length which is exceeded by 25 % of the fibers, by weight, in the test specimen. **[D13.11] D 1440, D 5332**

use-surface, *n*—*for pile yarn floor covering*, that part of a textile floor covering directly exposed to traffic. **[D13.21] D 5684**

vacuum, *v*—to clean using an electrically powered machine to create suction in order to remove loose, particulate soil and lint. **[D13.63] D 4852**

vacuum plated button, *n*—a button that is flash metal coated in vacuum chambers and subsequently colored to simulate other metal finishes. **[D13.54] D 5497**

vane, *n*—*in feathers*, the section that consists of a solid, stiff

collection of barbs, as distinguished from the section near the quill point that has soft, fluffy barbs. **[D13.61] D 4523**

variable, *n*—a quantity to which any of the values in a given set may be assigned. (See **parameter** and **variate**) **[D13.93] D 4271**

variables data, *n*—measurements which vary and may take any of a specified set of numerical values. **[D13.93] D 4854**

variance, s^2 **,** *n—of a sample*, a measure of the dispersion of variates observed in a sample expressed as a function of the squared deviations from the sample average. **[D13.93] D 2905, D 4853, D 4854**

variance, σ^2**,** *n—of population*, a measure of the dispersion of members of the population expressed as a function of the sum of the squared deviations from the population mean. **[D13.93] D 4854**

variate, *n*—a measured value that includes a random error of measurement; a variable with which a probability distribution is associated. (See also **variable** and **attribute data.**) **[D13.93] D 4271**

vegetable matter, *n—in wool top*, the pieces of burrs, seeds, shive, leaves, twigs, and grasses which have escaped removal in processing, also foreign vegetable fibers such as hemp, sisal, etc., if present. **[D13.13] D 1770, D 4845**

vegetable matter base, *n—in raw wool*, oven-dried scoured burrs, seeds, twigs, leaves, and grasses, free of mineral matter and alcohol-extractable matter. **[D13.13] D 584, D 1113, D 1334, D 2720, D 4845**

vegetable matter present, *n—in raw wool*, the weight of vegetable matter base present in the raw wool, adjusted to a moisture content of 12 %, an alcohol-extractives content of 1.5 %, and a mineral matter content of 0.5 %. **[D13.13] D 584, D 1334, D 4845**

velveteen, *n*—a woven fabric in twill or plain weave made with a short closely packed filling pile in imitation of velvet. **[D13.58] D 5103**

verification, *n*—the act or process of verifying. **[D13.93] D 4697**

verify, *v—specific-in textile testing*, to determine whether a previously calibrated instrument, standard solution, or other standard is still properly calibrated. **[D13.93] D 76, D 4697**

verify, *v—general*, to establish that an operation has been completed correctly. **[D13.93] D 76, D 4697**

vinyl-coated glass yarn, *n*—glass continuous filament yarn, coated with a pigment and plasticized vinyl chloride resin. **[D13.18] D 3374**

virgin wool, *n—as defined in the Wool Products Labeling Act*, "the terms 'virgin' or 'new' as descriptive of a wool product, or any fiber or part thereof, shall not be used when the product or part so described is not composed wholly of new or virgin fiber which has never been reclaimed from any spun, woven, knitted, felted, braided, bonded, or otherwise manufactured or used product." **[D13.13] D 1576, D 2462, D 4845**

visible waste, *n—in cotton testing*, foreign matter deposited in the waste boxes of the machine during the test. **[D13.11] D 2812**

vocational career apparel, *n*—career apparel which is generally subject to abusive wear and for which durability is a more important attribute than appearance. (See also **career apparel** and **dress career apparel**) **[D13.56] D 3995, D 4232**

volatiles, *n*—materials readily vaporizable at relatively low temperatures. **[D13.51] D 2654, D 4920**

vulcanization, *n*—an irreversible process, usually accomplished through the application of heat, during which a rubber compound through a change in its chemical structure (for example, crosslinking) becomes less plastic and more resistant to swelling by organic liquids while elastic properties are conferred, improved, or extended over a greater range of temperatures. **[D13.19] D 1871, D 2692, D 4393, D 4776, D 4777**

waist, *n—in anatomy*, the part of the body at the location between the lowest rib and hip identified by bending the body to the side. **[D13.55] D 5219**

waist girth, *n—in body measurements*, the circumference of the waist immediately below the lowest rib. **[D13.55] D 5219**

wale, *n—in knitted fabrics*, a column of successive loops in the length direction of the fabric. **[D13.59] D 4850**

wale, *n—in woven fabrics*, one of a series of raised portions or ribs lying warpwise in the fabric. **[D13.59] D 4850, D 5684**

wall and top material, *n*—any pliable planar structure used as a nonbase surface in camping tentage including roofs, sides, windows, screens, doors, awnings, flies, and canopies. **[D13.52] D 4372**

warp, *n*—(1) the yarn running lengthwise in a woven fabric (2) a group of yarns in long lengths and approximately parallel, put on beams or warp reels for further textile processing including weaving, knitting, twisting, dyeing, etc. **[D13.59] D 4850**

warp elongation and tension, *n*—stretch or tension measured in the warp direction of the fabric. **[D13.59]**

warp-faced twill, *n*—a twill weave in which the warp yarns produce the diagonal effect. (See also **twill weave** and filling faced twill.) **[D13.59] D 4850**

warp streak, *n—in woven fabric*, a narrow band running lengthwise and characterized by apparent differences in color from adjoining ends. **[D13.59] D 3990**

warp tests, *n—in fabric testing*, tests in which the warp yarns are torn. **[D13.60] D 1424**

warp-to-filling seam, *n*—a sewn seam in which the warp yarns are perpendicular to the sewn seam on one side of the seam and parallel to the seam on the opposite side of that seam. **[D13.59] D 4033**

warp-to-warp seam, *n*—a sewn seam in which the yarns in the warp direction on both sides of the seam are perpendicular to the seam. **[D13.59] D 4033**

wash-and-wear, *adj*—a generic term applied to fabrics or garments which satisfactorily retain a neat appearance after repeated wearing and suitable home laundering with little or no pressing or ironing. (Compare **durable-press**.)

DISCUSSION—The wash-and-wear performance of a fabric or garment depends on several factors including the types and amounts (percentages) of fibers used, the fabric construction, the finishing treatment, the presence of a colored pattern (either woven or printed), and the methods used for washing and drying. All of these factors contribute to the overall performance and determine, in any specific instance, how closely a fabric or garment will approach acceptance. **[D13.59] D 4850**

washboard, *n—in hosiery*, a ridgy effect caused by uneven tension between feeds on the knitting machine. **[D13.59] D 3990**

water, *n*—the chemical compound H_2O. **[D13.51] D 2654, D 4920**

water retained, *n—in textiles*, the amount of water absorbed by the fibers, adsorbed on the surface of the fibers, and held within the voids of the fabric after immersion, measured under specified conditions. **[D13.13] D 461**

water retention, *n*—the moisture remaining in and on a material after a specified mechanical treatment. **[D13.57] D 2402**

waterfowl feathers, *n*—feathers from ducks or geese, or both. **[D13.61] D 4523**

wavy cloth, *n*—a cloth that will not lie flat on a cutting table. (Compare **tight pick**.) **[D13.59] D 3990**

wavy face, *n*—a surface condition characterized by a considerable variation in yarn diameter. **[D13.59] D 3990**

wear level, *n*—the number of wear refurbishing cycles to which an item has been subjected. **[D13.53] D 3181**

wear-refurbishing cycle, *n—for a specific wear testing program*, one complete series of events that may be terminated by laundering or dry cleaning. **[D13.53] D 3181**

wear-service conditions, *n*—the specific conditions under which a textile is used (for example, at school, at work, at leisure, or at home). **[D13.53] D 3181**

wear test, *n*—a test in which textiles are subjected to wear-service conditions and evaluated for performance. **[D13.53] D 3181**

webbing, *n—in textiles*, a stout narrow fabric with a mass per unit area of at least 0.5 kg/m^2(0.1 lb/ft^2) for each 25.4 mm (1 in.) of width. (Compare **narrow fabric, ribbon**, and **tape**.) **[D13.18] D 580**

weftless fabric, *n—as used in tire building*, a sheet of parallel cords surrounded by uncured rubber compound. **[D13.19] D 4393**

weight, *v*—to determine the mass of a material. **[D13.57] D 4848**

weight, *n*—the force exerted on a body by gravity. (See also **mass** and**force**.) **[D13.92] D 123**

weight, *n—in warp knitting*, the number of tex (yards per pound) of finished fabric.

DISCUSSION—This may be expressed as square metres per kilogram or linear metres per kilogram (square yards per pound or linear yards per pound), in which case the width must be stated. **[D13.59] D 4850**

weight, *n—as used with fabrics*, mass per unit area.

DISCUSSION—Fabric mass per unit area is expressed either as grams per square meter (ounces per square yard) or grams per linear meter (ounces per linear yard). Fabric mass is also sometimes expressed inversely as linear meters per kilogram (yards per pound) with the fabric width stated. **[D13.60] D 3776**

well, *n—in buttons*, the recess in the center of a sew through flange button that gives aesthetics and identifies the face side. **[D13.54] D 5497**

welt seam, *n*—a complex seam formed on the inside of the object with one trimmed raw edge enclosed and one stitching line visible on the face side. **[D13.53] D 4965**

welted seam, *n—in upholstered furniture*, seam sewn with a strip of covered cord between the two fabric pieces, joined so that the welting shows on the exterior of the furniture unit. **[D13.63] D 4852**

welting, *n—in upholstered furniture*, a cord covered by strips of exterior fabric, used in welted seams of upholstery covering. **[D13.63] D 4852**

white wool, *n*—wool having shade variations from true white to creamy white but free of pigmented, dyed, or otherwise colored wools. **[D13.13] D 2475**

wide elastic fabric, *n*—an elastic fabric that is at least 150 mm (6 in.) in width. (Compare **narrow elastic fabric**.) **[D13.59]**

width, *n—of flat knit fabrics*, the perpendicular distance between the selvages when the fabric is under zero tension and free of folds or wrinkles. **[D13.59] D 3887**

width, *n—of circular knit fabrics*, twice the perpendicular distance between the enclosed edges of a flattened tube of fabric that is under zero tension and free of folds or wrinkles. **[D13.59] D 3887**

width, *n—of a raised-surface fabric*, the dimension included within the outer limits of the nap or pile, but excluding the selvages, or as otherwise agreed upon by the purchaser and supplier. **[D13.60] D 3774**

width, *n—of a fabric*, the distance from the outer edge of one selvage to the outer edge of the other selvage, measured perpendicular to the selvages while the fabric is held under zero tension and is free of folds and wrinkles. **[D13.60] D 3774**

width, *n—of a fabric woven on a shuttleless loom*, the distance from the outer warp on one side to the outer warp on the other side, measured perpendicular to the warp yarns while the fabric is held under zero tension and is free of folds and wrinkles. **[D13.60] D 3774**

widthwise direction, *n—in textiles*, the direction in a machine-made fabric perpendicular to the warp. **[D13.21] D 5684**

wildness, *n*—an obsolete term previously used to describe a number of cord properties including flare, straightness, and residual torsion. **[D13.19] D 2969**

winding system, *n—in open-end spinning machines*, a device which forms the yarn package. **[D13.58] D 3888**

windows, *n—parts of zippers*, the openings in pin-lock and cam-lock sliders through which the locking pin and cams, respectively, may extend. **[D13.54] D 2050**

wipe, *v—in upholstery cleaning*, to clean coated upholstery fabrics with a sponge or cloth wetted with a mild detergent, soap solution, or coated fabric cleaner formulated for the purpose. **[D13.62] D 5253**

wires per unit length, *n—for woven pile yarn floor covering*, the number of binding sites per unit of floor covering length;

wires in the widthwise direction being the usual means of forming the pile. **[D13.21] D 418, D 5684**

wool, *n—used in the generic sense in these tolerances*, the fiber from the fleece of the sheep or lamb, the hair of the Angora or Cashmere goat, rabbit hair, and the so-called specialty fibers from the hair of the camel, alpaca, llama, and vicuna. **[D13.58] D 2644**

wool, *n*—the fibrous covering of the sheep, *Ovis* species. **[D13.13] D 1282, D 1283, D 1294, D 1574, D 1575, D 1576, D 2118, D 2462, D 2475, D 2524, D 2968, D 3991, D 3992, D 4845**

wool, *n—as defined in the Wool Products Labeling Act of 1939*, "the fiber from the fleece of the sheep or lamb, or hair of the Angora goat or Cashmere goat (and may include the so-called specialty fibers from the hair of the camel, alpaca, llama, and vicuna) which has never been reclaimed from any woven or felted wool product." **[D13.13] D 1294, D 1574, D 1576, D 2257, D 2462, D 2475, D 4510**

wool base, *n*—oven-dried scoured wool free of alcohol-extractable matter, mineral matter, vegetable matter, and all impurities. **[D13.13] D 584, D 1334, D 2720**

wool content, *n*—the quantity of new and recycled wool, as defined in the Wool Products Labeling Act, which is determined by chemical analysis. **[D13.13] D 2475**

wool felt, *n*—a felt composed wholly of any one or a combination of new or recycled wool fibers. **[D13.13] D 461, D 2475**

woolen run—an indirect yarn numbering system in the woolen system, equal to the number of 1600-yd lengths per pound. (Compare **woolen cut**, **worsted count**.) **[D13.58] D 2260**

woolen-spun, *adj*—of, or pertaining to, material produced by the woolen system of yarn spinning as distinct from materials made by the worsted system of spinning. (Compare **worsted-spun.)** **[D13.58] D 2644**

woolen system, *n*—a spinning system employing a minimum of drafting and producing yarns of low-bulk density. **[D13.58] D 2644**

woolen yarn, *n*—yarn spun from wool fibers which have been carded but not combed or gilled. **[D13.13] D 4845**

work, *n*—the energy expended in displacing a body; mathematically, force times distance. **[D13.58] D 4848**

working cotton standard, *n*—a reference standard developed primarily for use within a specific laboratory. (See **Precision**.) **[D13.11] D 3025**

working elongation (WE), *n—of rope*, elongation which is immediately recoverable when tension is removed from the rope. **[D13.16] D 4268**

work recovery, *n*—the percent of recoverable work to the total work required to strain a fiber a specified amount under specified conditions. **[D13.58] D 1774**

work-to-break, *n*—the total energy required to rupture a specimen to the breaking force during a tensile test. **[D13.19] D 885**

work-to-rupture, *n*—the energy expended to tear apart a material. (See **work-to-break.** Compare **toughness.**) **[D13.58] D 4848**

worsted count, *n*—an indirect yarn numbering system in the worsted system equal to the number of 560-yd lengths per pound. (*Syn*. English worsted count. Compare **woolen run**.) **[D13.58] D 1059**

worsted-spun, *adj*—of, or pertaining to, materials produced by the worsted system of yarn spinning as distinct from materials made by the woolen system of spinning. **[D13.13] D 4845**

worsted system, *n*—a spinning system adapted to fibers 50 to 225 mm (2 to 9 in.) in length. **[D13.58] D 2645, D 4911**

worsted yarn, *n*—yarn spun from wool fibers which have been carded, and either gilled or combed, or both. **[D13.13] D 4845**

woven fabric, *n*—a structure produced when at least two sets of strands are interlaced, usually at right angles to each other, according to a predetermined pattern of interlacing, and such that at least one set is parallel to the axis along the lengthwise direction of the fabric. **[D13.60] D 3773, D 3786, D 5378**

wrap angle, *n—in yarn friction testing*, the cumulative angular contact of the test specimen against the friction-inducing device, expressed in radians. **[D13.58] D 3108, D 3412**

wrap-in, *n—in vinyl-coated glass yarns*, a method of completing a package after a break by wrapping the two ends together on the package without splicing or tying a knot. **[D13.18] D 3374**

wrinkle, *n*—an objectionable crease, generally short and irregular in shape. **[D13.59] D 3990**

wrinkle recovery, *n*—that property of a fabric which enables it to recover from folding deformations. **[D13.59] D 4850**

wrinkle resistance, *n*—that property of a fabric which enables it to resist the formation of wrinkles when subjected to a folding deformation.

DISCUSSION—"Crease resistance" is a term commonly used in place of the perferred term "wrinkle resistance." **[D13.59] D 4850**

wrist, *n—in anatomy*, the joint which articulates between the end of the lower arm and the hand. **[D13.55] D 5219**

wrist girth, *n—in body measurements*, the circumference over the prominence of the inner and the outer forearm bones. **[D13.55] D 5219**

wrong draw, *n—in woven fabric*, one or more incorrectly drawn warp ends in the harness or reed. **[D13.59] D 3990**

yarn, *n*—a generic term for a continuous strand of textile fibers, filaments, or material in a form suitable for knitting, weaving, or otherwise intertwining to form a textile fabric. **[D13.58] D 1423, D 2692, D 4974, D 5591**

yarn appearance, *n*—the visual effect obtained by viewing a sample of yarn wound with a designated traverse on a black board of designated size. **[D13.58] D 2255**

yarn break, *n—in sewn seams*, a mode of failure evidenced by yarns rupturing at the seam or at any other area in the test specimen. (Syn. yarn burst and yarn tear) **[D13.59] D 4033**

yarn crimp, *n—in fabric*, the undulations or waviness in a yarn due to interactions with other yarns.

DISCUSSION—yarn crimp in a fabric is the difference in the measured

distance between two points on a yarn as it lies in the fabric, and the same two points when the yarn has been removed from the fabric and straightened under a specified tension, expressed as a percent based on the in-fabric distance. **[D13.59] D 3883**

yarn distortion, *n—in woven fabrics*, a condition in which the symmetrical surface appearance of a fabric is altered by the shifting or sliding of warp or filling yarns. **[D13.59] D 1336**

yarn fault, *n—in textile strands*, a change in thickness sufficient without magnification.

DISCUSSION—In Test Method D 6197, a visible change in thickness, such as a abnormal thick and thin place in the yarn resulting in a large change in yarn diameter or any foreign matter affixed to or spun into the yarn, such as a nep, is considered to be a fault. Thick faults are reported as either major or minor depending on the combination of length and diameter. The most accepted criterion for major faults (infrequent thick places) is 250 to 400 % larger than yarn diameter. The minor faults (frequent thick places) are 100 to 150 % larger than yarn diameter and 1.0 to 40-mm (0.04 to 1.5 in.) long. The thin place classes are arranged and considered separately. The thin criteria for thin places may vary with the manufacturers, but will generally fall in the category of less than 30 % of diameter and greater in length than 10 mm. **[D13.58] D 6197**

yarn fault count, *n*—the number of yarn faults per specified length of product. **[D13.58] D 6197**

yarn number, *n*—a measure of the linear density of a yarn, expressed as "mass per unit length," or "length per unit mass," depending upon the yarn numbering system used. (Syn. **yarn count**.) (See**yarn numbering system**.) **[D13.58] D 1907, D 2260**

yarn number jute, *n*—mass per unit length of a yarn measured as the number of pounds per 13 167 m (14 400 yd), and expressed as pounds per spyndle. **[D13.16] D 541**

yarn numbering system, *n*—a system expresses the size of a yarn as a relationship between its length and associated mass. (See also **direct yarn numbering system** and **indirect yarn numbering system**.) **[D13.58] D 1059, D 1907, D 2260**

yarn package, *n*—a length or parallel lengths of yarn in a form suitable for handling, storing, or shipping. **[D13.58] D 2258**

yarn severance, *n*—a numerical value expressed on a percentage basis from this test that is used as an index of the degree of cutting of fabric yarns by the sewing machine needle in making sewn seams. **[D13.54] D 1908**

yarn slippage, *n—at the seam in sewn fabrics*, the displacement of one or more yarns from the original position, causing differences in alignment, spacing, or both. **[D13.59] D 4033, D 4034**

yarn take-up, *n—in fabric*, the additional length of yarn used to make a given length of fabric. **[D13.59] D 3883**

yield, *n—in knitted fabrics*, the number of finished square meters per kilogram (square yards per pound) of greige fabric. **[D13.59] D 4850, D 3883**

yield, *n—of wool*, the percentage of a designated commercial composition obtained by processing a lot of raw wool. **[D13.13] D 2720**

yield, *n—in raw wool*, the combined weight of clean wool fiber present and vegetable matter present, as a percentage of the raw wool weight. **[D13.13] D 584**

yield point, *n*—in a *stress strain curve*, the point beyond which work is not completely recoverable and permanent deformation takes place. **[D13.58] D 3822, D 4848**

yield strength, *n*—the stress at which a material exhibits a specified limiting deviation from the proportionality of a stree strain. **[D13.19] D 4975, D 6320**

Young's modulus, *n—in a stress-strain curve for an elastic material*, the ratio of change in stress to change in strain within the elastic region of the material. **[D13.58] D 4848**

zephyr yarn, *n*—a variety of soft worsted yarn characterized by a low twist and spun from wool which is as fine or finer in average diameter than U.S. Standard 64's grade tops. **[D13.13] D 4845**

zigzagged seam-finish, *n*—a finish for the raw edges of the seam allowances of a plain seam, in which machine zigzag stitching is placed 3 to 6 mm (⅛ to ¼ in.) from the raw edge. (Compare **edge-stitched seam-finish**.) **[D13.53] D 4965**

zipper, *n*—a slide fastener consisting of interlockable elements each attached to one of the opposing edges of two tapes and a movable part called a "slider" that spans the interlockable elements, which when moved in one direction causes the elements on one tape to interlock with the elements on the other tape, and when moved in the opposite direction causes the elements to disengage. (Compare **continuous element zipper** and **separate-element zipper.)** **[D13.54] D 2050**

4. Ready Reference Guide

4.1 The Ready Reference Guide is primarily for managing and using terminology developed in Committee D13. It provides the reader with a cross index. Every subcommittee in Committee D13 is listed by its numerical designation along with its area of specialization. Under each heading are two lists. The first is a numerical listing of all standards for which the subcommittee has jurisdictional responsibility. The second is an alphabetical listing of the terms which have been included in these standards. Those terms for which the subcommittee has jurisdictional responsibility are noted with a (J) after the term.

4.2 The user of Terminology D 123 should check the attributions noted after the definition in D123. Although different subcommittees may include a specific term and definition in their standards, the responsibility for management of the term will rest with the specific subcommittee as noted.

4.3 In developing the terminology section of a standard, the author should proceed as follows:

4.3.1 From the proposed title and the text of the standard, list all terms which must be defined.

4.3.2 From the Ready Reference, determine if any of these terms are already defined in the standards under the jurisdiction of the author's subcommittee. If a definition is already defined and is suitable, use that definition in the new standard. If the definition is not suitable, examine Section 3 of Terminology D 123 to determine which subcommittee has jurisdiction.

4.3.3 If the definition from Section 3 of Terminology D 123 is not suitable, follow the revision procedures as noted in Annex A4.

4.4 *D13.11 Cotton Fibers—Total Standards: 16*

D1440
D1441
D1442
D1445
D1447
D1448
D1464
D1684
D2253
D2495
D2812
D3025
D3817
D3818
D4604
D5332

A-tuft (J)	D5332
amount (J)	D1447, D3817, D4604
B-tuft (J)	D5332
blending plan (J)	D5332
breaking load	D1445
breaking tenacity	D1445, D4604
calibration cotton standard (J)	D1448, D3025, D3818, D4604
coefficient of length variation (J)	D5332
coefficient of variation (cv)	D1440
color grading (J)	D1684
color lamp (J)	D4604
color meter (J)	D4604
color space (J)	D2253
comber/brusher (J)	D4604
control limits (J)	D4604
cotton (J)	D1445
cotton color diagram (J)	D4604
cotton maturity (J)	D1442
cotton waste (J)	D2495
differential dyeing behavior (J)	D1464
elevator (J)	D4604
elongation	D4604
elongation at breaking load (J)	D1445, D4604
fiberweigh (J)	D4604
fibrogram (J)	D1447, D4604
fibronaire (J)	D4604
fineness	D1448, D4604
foreign matter (J)	D2812
ginned lint (cotton) (J)	D2495
grain	D4604
hooks (J)	D5332
horseshoe (J)	D5332
IC/TC (J)	D4604
IDT (J)	D4604
illumination (J)	D1684
immature fiber (J)	D1442
invisible waste (J)	D2812
kelvin	D1684
laboratory sample	D1441
length analyzer (J)	D4604
length distribution	D5332
length group (J)	D1440
length interval (J)	D1440
lint (J)	D2812
lint content (J)	D2812
lint cotton (J)	D2495
linters (J)	D4604
lot (J)	D1441
lot sample (J)	D1441
lumen (J)	D1442
mature fibers (J)	D1442
maturity cotton (J)	D3818
maturity index (J)	D3818
mean length (J)	D1440, D4605
micronaire reading (J)	D1442, D1448, D4604
moisture content	D2495
moisture free	D2495
moisture regain	D2495
mote (J)	D4604
non-lint content (J)	D2812
number of pieces of trash (J)	D4604
one percent length (<1 %N) (J)	D5332
oven dried	D2495
percent area (J)	D4604
percentage point	D2495
pull (J)	D1440
Rd and b *(test method for color)*	D4605
ratch setting by number (<1 %N) (J)	D5332
raw cotton (J)	D2253, D2495
reference standard (J)	D3025
seed coat fragment (J)	D4604
seed cotton (J)	D2495
short fiber content (J)	D5332
span length (J)	D1447, D3817
specimen	D1441
specimen clamp (J)	D4604
specimen loader (J)	D4604
standard atmosphere for pre-conditioning textiles	D4604
standard atmosphere for testing textiles	D4604
status switches (J)	D4604
stock in process (J)	D2495
strength analyzer (J)	D4604
tenacity	D1445, D4604
tensile strength	D1445, D4604
test beard (J)	D1447, D3817, D4604, D5332
test specimen (J)	D1442, D1447, D4604
trash (J)	D4604
trash meter (J)	D4604
tristimulus filters (J)	D4604
uniformity index (J)	D4604
uniformity ratio (J)	D1447
upper-half-mean length (J)	D4604
upper quartile length (UQL) (J)	D1440, D5332
visible waste (J)	D2812
working cotton standard (J)	D3025

4.5 *D13.13 Wool and Wool Felt—Total Standards: 30*

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D519
D584
D1060
D1113
D1234
D1282
D1283
D1294
D1334
D1574
D1575
D1576
D1770
D2118
D2130
D2165
D2252
D2462
D2475
D2524
D2525
D2720
D2816
D2817
D2968
D3991
D3992
D4510
D4845

acid content (J)	D461
alkali-solubility (J)	D1283
alpaca (J)	D2252
papermaker's felt (J)	D2475
part wool felt (J)	D461, D2475
partial cleavage (J)	D4510

animal fiber (J)	D1574, D4510
aqueous extract (J)	D2165
average fiber diameter (J)	D2130, D2252, D3991, D3992
black felt (J)	D2475
breaking tenacity	D1294, D2524
burr-wool waste (J)	D4845
carbonized and neutralized wool (J)	D2118
carded wool (J)	D1575
cashmere (J)	D2816, D2817
cashmere coarse-hair (J)	D2816, D2817
cashmere coarse-hair content (J)	D2816, D2817
cashmere down (J)	D2816, D2817
cashmere hair (J)	D2816, D2817
clean wool fiber present (J)	D584, D1060, D1334
colored fiber (J)	D1770, D4845
combing wool (J)	D4845
commercial composition (J)	D2720
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commercial moisture content (J)	D2118
Constant-rate-of-extension tensile testing machine (CRE)	D1294, D2524
constant-rate-of-load tensile testing machine (CRL)	D1294, D2524
constant-rate-of-traverse tensile testing machine (CRT)	D1294, D2524
core, *in sampling fiber packages* (J)	D1060
cortex (J)	D4510
cuticle (J)	D4510
dimensional change in boiling water (felt) (J)	D461
epidermis (J)	D4845
extractable matter (J)	D461, D1574
felt (J)	D2475, D4845
fineness (J)	D2252, D3991, D3992
fire resistance (J)	D461
fleece (J)	D1234
gage length, *in tensile testing* (J)	D1294, D2524
grade, *in wool and mohair* (J)	D2130, D3991, D3992
gray felt (J)	D2475
grease wool (J)	D1234, D1574, D1576, D2462
hair (J)	D4845
kemp fiber (J)	D2968
laboratory sample	D2525
laboratory sample, *in wool top* (J)	D1770
lot, *in wool top* (J)	D1770
lot sample	D2525
med fiber (J)	D2968
medulla (J)	D2968
medullated fiber (J)	D2968
merino (J)	D4845
mohair (J)	D3991, D3992
moisture content (J)*	D1576, D2462
moisture-free (J)	D1576, D2462
moisture regain (J)*	D1576, D2462
natural fiber (J)	D4845
needled felt (J)	D2475
nep	D1770
noil (J)	D4845
orthopedic and surgical felt (J)	D2475
other alkali-insoluble impurities (J)	D584, D1113, D1334
oven-dried wool (J)	D1574
pulled wool (J)	D1576, D2462, D4845
raw wool (J)	D584, D1060, D1334, D1576, D2462
recycled wool, *as defined in the Wool Products Labeling Act (J)*	D1294, D1574, D1576 D2462, D2475
roping (J)	D4845
sample	D2525
sampling unit, *in wool* (J)	D2525, D4845
scoured wool (J)	D1575, D1576, D2462
shrinkage	D461
sliver	D1282
speciality felt (J)	D2475
specific area, *of wool* (J)	D1282
specific gravity, *of felt* (J)	D2475
specimen	D2525
splitting resistance (J)	D461
staple, *in grease wool* (J)	D1234
staple length, *in grease wool* (J)	D1234
supported needled felt (J)	D461, D2475
tenacity (J)	D1294
tensile strength (J)	D1294
test specimen, *for wool top* (J)	D1770
top, *in wool* (J)	D519, D1282, D1770, D3992
unsupported needled felt (J)	D461, D2475
vegetable matter, *in wool top* (J)	D1770, D4845
vegetable matter base, *in raw wool* (J)	D584, D1113, D1334, D2720, D4845
vegetable matter present, *in raw wool* (J)	D584, D1334, D4845
virgin wool, *as defined in the Wool Products Labeling Act* (J)	D1576, D2462, *D4845*
water retained, *in textiles* (J)	D461
white wool (J)	D2475
wool (J)	D1282, D1283, D1294, D1574, D1575, D1576, D2118, D2462, D2475, D2524, D2968, D3991 D3992, D4845
wool, *as defined in Wool Products Labeling Act*	D1294, D1574, D1576, D2462, D2475, D4510
wool base (J)	D584, D1334, D2720
wool content (J)	D2475
wool felt (J)	D461, D2475
woolen yarn (J)	D4845
worsted-spun (J)	D4845
worsted yarn (J)	D4845
yield, *in raw wool* (J)	D584
yield, *of wool* (J)	D2720
zephyr yarn (J)	D4845

4.6 *D13.16 Rope and Cordage—Total Standards: 4*

D541
D681
D1233
D4268

bale (jute) (J)	D541
bast and leaf fibers (J)	D1233
braided rope (J)	D4268
breaking force	D4268
breaking load	D541
cored braid (J)	D4268
cycle length (J)	D4268
cycled breaking elongation	D4268
jute (J)	D681
kink (J)	D4268
non-elastic elongation (J)	D4268
peak cyclic force (J)	D4268
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plain braid (J)	D4268
plaited rope (J)	D4268
recoverable elongation (J)	D4268

cycled breaking extension	D4268
cycled % extension	D4268
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fid (J)	D4268
hockle (J)	D4268
hollow braid (J)	D4268
initial breaking elongation	D4268
initial breaking force	D4268
initial % elongation	D4268
reference tension (J)	D4268
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rope (J)	D4268
rove (J)	D681
solid braid (J)	D4268
spyndle number (J)	D681
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through cyclic force	D4268
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—for bast fibers (J)	
twisted or laid rope (J)	D4268
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4.7 *D13.18 Glass Fiber—Total Standards: 10*

D578	D4028
D579	D4029
D580	D4030
D581	D4389
D3656	D4963

acceptable quality level (AQL or P_1)	D4028
atmosphere for testing textiles, *for glass* (J)	D578, D579, D580, D581, D3374 D3656, D4029, D4030, D4909, D4912, D4963
atmosphere for testing textiles for glass (J)	D580
atmosphere for testing, *for glass textiles* (J)	D4389
atmosphere for testing glass textiles (J)	D4028
blocking, *of coated vinyl fiber glass yarn solar screening* (J)	D4028
braid (J)	D581
carrier, *in braiding machinery* (J)	D581
chopped strand, *in glass textiles* (J)	D578
color stability, *in coated glass textiles* (J)	D4909
continuous filament yarn (J)	D578, D579, D580, D581 D4029, D4389
cord, *of glass fiber* (J)	D4030
crowfoot weave (J)	D579, D4029
eight-harness satin (J)	D579, D4029
fabric stability, *in vinyl coated glass screening and louver cloth* (J)	D3656, D4912
finished, *for glass laminates* (J)	D4029
greige goods (J)	D579, D580, D581
ignition loss, in glass textiles (J)	D4963
insect screening, *in coated glass yarn fabrics* (J)	D3656
leno weave (J)	D579, D4029
louver cloth, *in coated glass yarn fabrics* (J)	D3656
mesh, *in coated glass yarn fabrics* (J)	D3656, D4028
mock leno weave (J)	D579, D3374, D4029
neoprene treated, *in glass fiber* (J)	D4030
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shading coefficient (J)	D4028
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tape, *in textiles* (J)	D580
textured glass yarn (J)	D578
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untreated (J)	D4030
vinyl-coated glass yarn (J)	D3374
webbing, *in textiles* (J)	D580
wrap-in (J)	D3374

4.8 *D13.19 Tire Cords—Total Standards: 12*

D0885	D4393
D1871	D4776
D2229	D4974
D2692	D4975
D2969	D5591
D2970	D6320

adhesion (J)	D4393, D4776
adhesion, *in tire fabrics* (J)	D4393, D4776
air wicking, *in tire fabrics* (J)	D2692
rubberize (J)	D4393
catenary length (J)	D2970
chafer fabric, *in tire fabrics* (J)	D2692, d4393
residual torsion (J)	D2969
rubber (J)	D1871, D4393, D4776
rubber compound, *as used in the manufacture of rubber articles* (J)	D1871, D4393, D4776
single twist (J)	D885
steel cord (J)	D2229, D2969, D4393

cord twist (J)	D885, D2970
core (J)	D2969
dip (J)	D885, D2970 D4393
dip pick-up, *in glass cords* (J)	D2970
dip pick-up, *in a textile cord or fabric* (J)	D885
fabric dip	D4393
filament, *in steel cord* (J)	D2969
growth (J)	D885
holland cloth (J)	D1871, D4393
industrial yarn (J)	D885, D2970, D4776
moisture equilibrium for testing, *for industrial yarns& tire cords* (J)	D885
wildness (J)	D2969
work-to-break (J)	D885
steel cord wrap (J)	D2969
steel filament (J)	D2969
steel strand (J)	D2969
stitch, *in making rubberized articles* (J)	D4393
straightness, *in steel cored* (J)	D2969
tabby sample (J)	D885, D2970
tack, *for rubber or rubber compounds* (J)	D4393
tire cord, *as used in this test method* (J)	D885, D2692, D4393
tire cord	D2692, D2970, D4393, D4974
tire cord fabric (J)	D885, D2692, D2970, D4393
tire fabric (J)	D2692
vulcanization (J)	D1871, D2692, D4776, D4393
weftless fabric (J)	D4393

4.9 *D13.20 Inflatable Restraints—Total Standards: 5*

D5426	D5822
D5427	D6476
D5428	D6478
D5446	D6479
D5645	D6613

	abrasion	D5426
	accelerated aging (J)	D5427
	air splice	D5426
	bleedthrough	D5426
	blip	D5426
	breakout pressure (J)	D5428
	broken filament	D5426
*†	bruise (J)	D5426
*†	coated fabric (J)	D5446
	coating slub	D5426
	coating streak	D5426
	coating transfer	D5426
	contamination	D5426
	cushion (J)	D5426, D5428, D5645
	cushion overpressurization	D5645
*†	defect (J)	D5426
	deployment (J)	D5428, D5645
	environmental conditions	D5427
*†	filling bar (J)	D5426
	foreign matter	D5426
	grading (J)	D5426
*†	hole (J)	D5426
	imperfection (J)	D5426
	inflatable restraint (J)	D5426, D5427, D5428, D5645
	inflator (J)	D5428, D5645
*†	inspection (J)	D5426
	leak rate	D5645
	long float	D5426
	loop	D5426
	major imperfection (J)	D5426
	maximum inflation pressure (J)	D5428
	minor imperfection (J)	D5426
	missing coating	D5426
	missing yarn	D5426
	misweave	D5426
	module (J)	D5426, D5427, D5645
	rework	D5426
	sharp crease	D5426
	short knot	D5426
	short float	D5426
	spit mark	D5426
	stain	D5426
	standard atmosphere for testing textiles	D5427, D5645
	tight yarn	D5426
	yarn streak	D5426

*† Indicates dual jurisdiction due to special needs of this industrial segment.
Delimited definitions for these terms enables them to be included in training aids to show the appearance instead of the cause.

4.10 *D13.21 Pile Floor Coverings—Total Standards: 15*

D418	D5684
D1335	D5793
D2646	D5823
D2859	D5848
D3936	D6119
D5251	D6283
D5252	D6540
D5417	

attached cushion (J)	D3936, D5684
back coating (J)	D418, D5684
backing (J)	D5251, D5252, D5684
backing fabric (J)	D2646, D5684, D5848
binding site (J)	D5684, D5793
buried pile yarn (J)	D5684, D5848
carpet (J)	D5684
carpet module (J)	D1335, D5684
components (J)	D5684, D5793
constant-rate-of-extension	D1335, D3936
pile (J)	D5251, D5252, 5417, D5684
pile height (J)	D5684, D5823
pile lay (J)	D5251, D5252, D5417, D5684, D6119, D6540
pile reversal (J)	D5684
pile thickness (J)	D5684, D5823
pile yarn floor covering (J)	D1335, D2646, D2859, D3936, D5251, D5252, D5417, D5684, D5823, D5848, D6119, D6540
pile yarn mass	D5684, D5848
pitch (J)	D418, D5684
practice (J)	D5251, D5252, D5417, D6119
primary backing (J)	D2646, D5684, D5793, D6283

crush (J)	D5684, D6119
cut pile yarn floor covering (J)	D1335, D5684
dents per unit width (J)	D418, D5684
extractable matter	D2646, D5684
finished (J)	D2859, D5684
finished pile yarn floor covering (J)	D2859, D5684
flame resistance (J)	D2859, D5684
flame retardant(J)	D2859, D5684
flame retardant treatment (J)	D2859, D5684
floor covering(J)	D1335, D2646, D2859, D3936, D5251, D5252, D5417, D5684, D5793, D5823, D5848, D6119, D6283, D6540
foot traffic units (J)	D5684, D6119
frame yarn	D418
fusion bonded (J)	D1335, D5684
gage, *of a tufting machine*(J)	D418
gage, *of a tufted pile yarn floor covering*(J)	D418
ignition (J)	D2859, D5684
lengthwise direction (J)	D5251, D5252, D5417, D5684, D6540
level pile (J)	D418
loop pile yarn floor covering (J)	D1335, D5684, D5823, D6283
loss of tuft definition	D5684, D6119
matting (J)	D5684, D6119
multilevel pile (J)	D418, D5684
needles per unit width (J)	D5684, D5793
nonwoven fabric (J)	D5684
peak force (J)	D3936, D5684
wires per unit length	D418, D5684
resistance to delamination(J)	D3936, D5684
rug	D5684
secondary backing(J)	D1335, D2646, D3936, D5251, D5252, D5417, D5684, D6119
shorn pile(J)	D5684
shrinkage	D2646, D5684
single level pile (J)	D418
soiling (J)	D5684, D6540
stitches (J)	D5684, D5793, D6283
stubble (J)	D5684
stubble height (J)	D5684
stuffer yarn (J)	D418
textile floor covering (J)	D5684
texture (J)	D5251, D5252, D5417, D5684, D6119
total mass(J)	D5684, D5848
tuft (J)	D1335, D5684, D5793
tuft bind (J)	D1335, D5684
tuft element (J)	D5684, D5823, D6283
tuft height(J)	D5684, D5823
tuft leg(J)	D1335, D5684, D5823, D6283
tuft length	D5684, D6283
tufted fabric (J)	D5684, D5793, D6119
underlay (J)	D5252, D5417, D5684
use surface (J)	D5684
wale (J)	D5684
widthwise direction (J)	D418, D5684

4.11 *D13.24 Elastomeric Fabrics & Yarns—Total Standards: 4*

D1775
D3106
D4964
D5278

breaking force	D3106
constant-rate-of-extension *tensile testing machine*	D1775, D4964
constant-rate-of-load *tensile testing machine*	D1775, D4964
elastomeric yarn (J)	D3106
elongation	D1775, D3106, D4964, D5278
elongation at break	D3106
extension	D1775, D3106, D4964
force	D1775, D3106, D4964
linear density	D3106
permanent deformation	D3106
tension (J)	D1775, D4964
tension test (J)	D1775, D4964

4.12 *D13.51 Chemical, Conditioning, and Performance—Total Standards: 8*

D276
D629
D1518
D1776
D1909
D2257
D2654
D4920

absolute humidity (J)	D4920
absorption (J)	D4920
adsorption (J)	D4920
atmosphere for testing (J)	D4920
bicomponent fiber	D276, D629
birefringence (double refraction) (J)	D276
bulk density (J)	D1518
clo (J)	D1518
commercial mass	D4920
commercial moisture content	D4920
commercial moisture regain (J)	D1909, D2654, D4920
condition (J)	D4920
density (J)	D276
oven-dried (J)	D2654, D4920
pH (J)	D1776
precondition (J)	D1776
psychrometer (J)	D4920
refraction (J)	D276
refractive index (index of refraction) (J)	D276
relative humidity (J)	D4920
resorption (J)	D2654, D4920
sorption (J)	D4920
specific clo	D1518
standard atmosphere for preconditioning (J)	D1776
standard atmosphere for testing	D1776, D4920
standard atmosphere for testing, *in textiles*	D2654, D4920

desorption (J)	D4920
dew point (J)	D2654, D4920
effective insulation ratio (J)	D1518
extractable matter	D2257
fiber density (J)	D276
fiber birefringence (J)	D276
heat transfer coefficient	D1518
humidity (J)	D4920
hygrometer (J)	D2654, D4920
mean temperature (J)	D1518
moisture (J)	D4920
moisture content (J)	D1776, D2654, D4920
moisture equilibrium (J)	D1776, D2654, D4920
moisture equilibrium for preconditioning (J)	D1776
moisture equilibrium for testing (J)	D1776
moisture free (J)	D2654, D4920
moisture pick-up, *at moisture equilibrium* (J)	D2654, D4920
moisture pick-up (J)	D2654, D4920
moisture regain (J)	D1776, D2654, D4920
standard atmosphere for testing, *in glass textiles*	D4920
standard atmosphere for testing, *in tire cord and industrial yarn textiles (J)*	D4920
standard condition (J)	D4920
standard moisture regain (J)	D2654, D4920
thermal conductivity (J)	D1518
thermal resistance (J)	D1518
thermal resistivity (J)	D1518
thermal transmittance (J)	D1518
total clo	D1518
volatiles (J)	D2654, D4920
water (J)	D2654, D4920
wool	D2257
zero-moisture	D2654

4.13 *D13.52 Flammability—Total Standards: 7*

D1230
D3659
D4151
D5238
D4372
D4391
D4723

after-flame time	D4372
batting	D5238
blanket	D4151
burning behavior	D4723, D4391
camping tentage (J)	D4372
combustible textile	D1230
flame resistance	D4372
flame resistant	D4372
flame retardant	D1230
flame retardant-treated	D1230
flame spread	D1230
flame-spread time	D1230
flammability	D1230, D3659, D4151, D4391
flooring materials (J)	D4372
glow	D4372
ignition	D4151
interlining	D1230
raised fiber surface (J)	D1230
semi-restraint (J)	D3659
wall and top material (J)	D4372

4.14 *D13.53 Consumer Applications and Textile Conservation—Total Standards: 5*

D3181
D4965
D5038
D5429
D5646

back side (J)	D4963
backing fabric (J)	D5429
blind hem stitch (J)	D5646
block (J)	D5429
bound seam finish (J)	D4965
buttonhole stitch (J)	D5646
clean-finish seam finish (J)	D4965
complex seam (J)	D4965
conservation (J)	D5038
conservator (J)	D5038
control undercover garment (J)	D3181
craftsman (J)	D5038
cultural object (J)	D5038
dedicate pretreatment procedure (J)	D5429
documentary characteristic (J)	D5038
documentation (J)	D5038
double stitched seam finish (J)	D4965
double welt seam (J)	D4965
edge-stitched seam finish (J)	D4965
end-use (J)	D3181
evaluation period (J)	D3181
examination (J)	D5038
face side (J)	D4965
flat-felled seam (J)	D4965
French seam (J)	D4965
glued seam (J)	D4965
grade	
objects of cultural heritage (J)	D5038
objects of natural heritage (J)	D5038
outside seam (J)	D4965
participant (J)	D3181
performance property (J)	D3181
pH	
pinked seam finish (J)	D4965
plain seam (J)	D4965
preservation (J)	D5038
pressing	
rating (J)	D3181
restoration (J)	D5038
rolled seam finish (J)	D4965
seam (J)	D4965
seam allowance	
seam finish (J)	D4965
self-bound seam finish (J)	D4965
sewing machine (J)	D5646
sewn seam	
simple machine stitch pattern (J)	D5646
single stitch zigzag (J)	D5646
slot seam (J)	D4965
softness (J)	D5429
stapled seam (J)	D4965
stitched and pinked seam finish (J)	D4965
straight stitch (J)	D5646
stretch stitch (J)	D5646

greige goods	
hand-overcast seam finish (J)	D4965
hard water (J)	D5429
hardness, *in water* (J)	D5429
Hong Kong seam finish (J)	D4965
inside seam (J)	D4965
ironing	
lapped seam (J)	D4965
machine stitch (J)	D5646
mock French seam (J)	D4965
multiple stitch zigzag (J)	D5646
sturdy pretreatment procedure (J)	D5429
thermally-bonded seam (J)	D4965
topstitching (J)	D4965
trim (J)	D4965
tucked seam (J)	D4965
wear level (J)	D3181
wear-refurbishing cycle (J)	D3181
wear-service condition (J)	D3181
wear test (J)	D3181
welt seam (J)	D4965
zigzagged seam finish (J)	D4965

4.15 *D13.54 Subassemblies—Total Standards: 24*

D1683	D2058	D3692
D1908	D2059	D3940
D2050	D2060	D4465
D2051	D2061	D4846
D2052	D2062	D5169
D2053	D2724	D5170
D2054	D3135	D5171
D2057	D3657	D5497

automatic lock slider (J)	D2050
bail (J)	D2050
bead (continuous element zipper) (J)	D2050
bead (separate element zipper) (J)	D2050
blister (J)	D2724, D3135
bond strength (J)	D2724, D3135
bonded fabric (J)	D2724, D3135
bottom assembly (J)	D2050
bottom stop (J)	D2050
bridge (J)	D5497
bridge top stop (J)	D2050
bubble	D2724, D3135
bursting strength	D3940
button (J)	D5171, D5497
can lock slider (J)	D2050
centrifugal cast button (J)	D5497
chain (J)	D2050
chain thickness (J)	D2050
chain width (J)	D2050
closed face fabric (J)	D3135
colorfastness	D2052
compression molded button (J)	D5497
compression molding (J)	D5497
connecting ring (J)	D2050
continuous element (J)	D2050
continuous element zipper (J)	D2050
cord (J)	D2050
crack mark (J)	D2724, D3135
crimp (J)	D2050
cut-off (J)	D2050
denim	D4465
diamond (J)	D2050
differential shrinkage (J)	D3692
drycleanable button (J)	D5497
drycleaning	D2052
dungaree	D4465
electroplated button (J)	D5497
element (J)	D2050
exposed tape width (J)	D2050
fabricate (J)	D5497
face (J)	D5171, D5497
failure (J)	D1683, D3940
finish, *in buttons* (J)	D5497
fixed retainer (J)	D2050
flange lock slider (J)	D2050
flanges (J)	D2050
foam tear (J)	D2724, D3135
fused fabric (J)	D2724, D3135
fusible fabric (J)	D2724, D3135
grin (J)	D1908
head (J)	D2050
hole spacing (J)	D5497
hook & loop fastener (J)	D5169
needle damage (J)	D1683, D1908
nonseparable zipper (J)	D2050
open-face fabric (J)	D3135
orientation (J)	D5497
pin lock slider (J)	D2050
pocket (J)	D2050
puckering (J)	D2724, D3135
pull (J)	D2050
quick disassembly zipper (QD) (J)	D2050
quick release zipper (QR) (J)	D2050
ratchet lock slider (J)	D2050
refurbish	D1908
releasing slider (J)	D2050
releasing stop (J)	D2050
retainer pin (J)	D2050
ring (J)	D5497
rod cast button (J)	D5497
rotation cast button (J)	D5497
seam allowance (J)	D1683, D1908, D3940
seam assembly (J)	D1683, D1908, D3940
seam damage (J)	D1683, D1908
seam efficiency (J)	D1683
seam engineering (J)	D1683
seam failure (J)	D1683
seam interaction (J)	D1683
seam slippage (J)	D1683
seam type (J)	D1683, D1908, D3940
separable pin (J)	D2050
separable zipper (J)	D2050
separate element zipper (J)	D2050
sew-through flange button (J)	D5497
sew-through shank button (J)	D5497
sewing hole (J)	D5497
sewn seam (J)	D1683, D1908, D3940
sewn seam strength (J)	D1683
shear strength (J)	D5169
sheet cast button (J)	D5497
shoulder (J)	D2050
shrinkage	D3692
slider (J)	D2050
snap action (J)	D4846
snap fastener (J)	D4846
solvent relative humidity	D2724
stitch (J)	D1683, D1908, D3940
stitch density (J)	D1683, D1908, D3940
stitch gage (J)	D1683, D1908, D3940
stitch type (J)	D1683, D1908, D3940
stitching (J)	D1908
stop (J)	D2050
stringer (J)	D2050
tape (J)	D2050
tape ends (J)	D2050
thong hole (J)	D2050

impact resistance (J)	D5171
injection molded button (J)	D5497
injection molding (J)	D5497
interlining (J)	D2724, D3135
laminated fabric (J)	D2724, D3135
lateral holding strength (J)	D4846
launderability	D5497
laundering	D5497
legs (J)	D2050
ligne (J)	D5497
lot (J)	D2724
lug (J)	D2050
luster (J)	D5497
metal cast button (J)	D5497
mouth (J)	D2050
mouth width (J)	D2050
movable retainer (J)	D2050
throats (J)	D2050
toggle (J)	D5497
top stop (J)	D2050
trouser	D4465
trumnions (J)	D2050
vacuum plated button (J)	D5497
well (J)	D5497
wheel cast button (J)	D5497
windows (J)	D2050
yarn severance (J)	D1908
yarn slippage	D1683
zipper (J)	D2050

4.16 *D13.55 Body Measurements for Apparel Sizing—Total Standards:4*

D4910 D5586
D5219
D5585

acromion (J)	D5219
across shoulder (J)	D5219
ankle (J)	D5219
ankle girth (J)	D5219
arm length (J)	D5219
armhole (J)	D5219
armpit (J)	D5219
armscye (J)	D5219
armscye circumference (J)	D5219
back break point (J)	D5219
back waist length (J)	D1353
back width (J)	D5219
body dimension (J)	D5219
body measurements (J)	D5219
bust	D5219
bust girth (J)	D5219
bust point to bust point (J)	D5219
calf girth (J)	D5219
center back waist length (J)	D5219
center front waist length (J)	D5219
cervicale (J)	D5219
cervicale to bust point (J)	D5219
cervicale to wrist (J)	D5219
chest girth (J)	D5219
cross-back width	D5219
cross-chest width (J)	D5219
crotch (J)	D5219
crotch depth	D5219
crotch height	D5219
crown (J)	D5219
drop (J)	D5219
elbow (J)	D5219
elbow girth (J)	D5219
front-break point (J)	D5219
front high-hip (J)	D5219
full-bust girth	D5219
head circumference	D5219
head girth (J)	D5219
height (J)	D5219
high-bust girth	D5219
high-hip girth (J)	D5219
hip (J)	D5219
hip girth (J)	D5219
inside-leg length (J)	D5219
knee (J)	D5219
knee girth (J)	D5219
mid-neck girth (J)	D5219
mid-thigh girth (J)	D5219
neck base girth (J)	D5219
outside-leg length (J)	D5219
scye depth (J)	D5219
shoulder circumference (J)	D5219
shoulder joint (J)	D5219
shoulder length (J)	D5219
shoulder slope (J)	D5219
sizing system (J)	D5219
stature	D5219
thigh girth (J)	D5219
total crotch length (J)	D5219
total vertical trunk length (J)	D5219
true rise (J)	D5219
underseam length (J)	D5219
upper-arm girth (J)	D5219
upper-arm length (J)	D5219
waist (J)	D5219
waist girth (J)	D5219
wrist (J)	D5219
wrist girth (J)	D5219

4.17 *D13.56 Performance Standards for Textile Fabrics—Total Standards: 31*

3477	3778	3819	4035	4117	4232
3562	3779	3820	4037	4118	4234
3597	3781	3887	4038	4119	4235
3655	3782	3994	4109	4154	4771
3690	3783	3995	4115	4156	
3691		3996			

bedspread	D4037	lining fabric (J)	D3783
		nectie (J)	D4035

blocking (J)	D3690
career apparel (J)	D3995, D4232
coat (J)	D3778
contract furniture (J)	D4771
dimensional change, *in pressing and finishing* (J)	D3562, D3779, D3781, D3782 D3995, D4119, D4154
dress glove (J)	D4115
dress career apparel (J)	D3995, D4232
dress shirt, *for boys* (J)	D3477
dress shirt, *for men* (J)	D3477
flock (J)	D3597
greige yield (J)	D3887
hydrolytic stability (J)	D3690
indoor furniture (J)	D4771
pajamas (J)	D3819
pressing and finishing (J)	D3562, D3779, D3781, D3782, D3995, D4119, D4154
sheer (J)	D3691, D4038, D4117, D4156, D4234, D4235
sliver knitted fabric (J)	D3655
swimwear (J)	D3994, D3996
tack tear (J)	D3690
Type I apparel (J)	D4109, D4118
Type II apparel (J)	D4109, D4118
underwear (J)	D3820
upholstered furniture (J)	D4771
upholstery fabric (J)	D4771
vocational career apparel, (J)	D3995, D4232

4.18 *D13.58 Fibers, Test Methods, General—Total Standards: 14*

D1577	D3217	D4120
D2102	D3333	D4466
D2402	D3513	D4848
D2612	D3822	D5103
	D3937	D5104

bicomponent fiber (J)	D4466
breaking force (J)	D3106, D3217, D3822, D4848
breaking point (J)	D4848
breaking strength (J)	D4848
breaking tenacity (J)	D3217, D3822, D4848
breaking toughness (J)	D3822, D4848
chord modulus (J)	D3822, D4848
cohesive force (J)	D2612, D4120, D4849
component, as used with textile fiber polymers (J)	D4466
compression	D4848
compressive force	D4848
compressive recovery	D4848
compressive resistance	D4848
container (J)	D3333, D4849
crimp (J)	D3937, D4849
crimp frequency (J)	D3937, D4849
crimp index (J)	D3937, D4849
deformation (J)	D4848
delayed deformation (J)	D4848
delayed elastic recovery (J)	D4848
effective fiber length (J)	D1577, D4849
elastic limit (J)	D4848
elasticity (J)	D4848
elongation (J)	D1774, D3822, D4848
elongation at break (J)	D3822, D4848
elongation at rupture (J)	D4848
elongation at specified force (EASF) (J)	D3822, D4848
extensibility (J)	D4848
extension recovery cycle (J)	D4848
failure (J)	D4848
fiber	D3822
fiber beard, in length testing of fibers (J)	D3513, D4849
fiber chip (J)	D3937, D4849
fiber cohesion (J)	D2612, D4120, D4724, D4849
filament	D3822
filament yarn (J)	D3822, D4849
force (J)	D4848
force at rupture (J)	D4848
force at specified elongation (FASE) (J)	D3822, D4848
force-deformation curve (J)	D4848
force-elongation curve (J)	D4848
force-extension curve (J)	D4848
fundamental resonant frequency (J)	D4848
generic class, as used with textile fibers (J)	D4466
immediate elastic recovery (J)	D4848
initial modulus (J)	D3822, D4848
knot breaking force (J)	D4848
knot breaking strength (J)	D4848
laboratory sample	D3333
lateral (J)	D4466
manufactured staple fiber	D3217, D3333
mass (J)	D4849
matrix (J)	D4466
modulus (J)	D4848
monofilament (J)	D3822, D4849
multiple length staple fibers (J)	D3513, D4849
overlength staple fibers (J)	D3513, D4849
permanent deformation (J)	D1774, D3106, D4848
polymer (J)	D4466
pretension (J)	D4848
primary sampling unit	D3333
roving (J)	D4120, D4849
rupture (J)	D4848
sample	D3333
sampling unit	D3333
secant modulus (J)	D4848
sheath-core (J)	D4466
shipping unit (J)	D3333, D4849
shrinkage	D2102, D5104, 4849
single-strand breaking force (J)	D4848
skein break factor (J)	D4848, D4849
skein breaking tenacity (J)	D4848
sliver (J)	D4120, D4849
specimen	D3333
staple, adj, n (J)	D3513, D4849
strain (J)	D4848
strength (J)	D4848
strength at rupture (J)	D4848
stress (J)	D4848
stress-decay (J)	D4848
stress-strain curve (J)	D4848
tangent modulus (J)	D3822, D4848
tenacity (J)	D3217, D3822, D4120, D4848
tenacity at rupture (J)	D4848
tenacity at specified elongation (TASE) (J)	D4848
tensile (J)	D4848
tensile hysteresis curve (J)	D4848
tensile strain (J)	D4848
tensile strain recovery (J)	D1774 (D4848)
tensile strength (J)	D4848
tensile stress (J)	D4848
tensile test (J)	D4848
tension (J)	D4848, D1775, D4964
tension test (J)	D4848
tex	D1577, D4849
top (J)	D4120, D4849
torque (J)	D4848
toughness (J)	D4848
toughness at rupture (J)	D4848
tow (J)	D3822, D4849

length distribution (J)	D5103
linear density (J)	D1577, D3106, D3217, D3822, D4848, D4849
load (J)	D4848
loop breaking force (J)	D4848
loop breaking strength (J)	D4848
lot	D3333
lot sample	D3333
tricomponent (J)	D4466
water retention (J)	D2402
weigh (J)	D4848
weight (J)	D4848, D 4849
work (J)	D4848
work recovery (J)	D1774, D4848
work to break (J)	D4849
work to rupture (J)	D4848
yield point (J)	D3822, D4848
Young's modulus (J)	D4848

4.19 *D13.58 Yarn Test Methods, General—Total Standards: 37*

D0076	D2256	D3412	D6197
D0204	D2258	D3693	D6587
D0861	D2259	D3823	D6612
D1059	D2260	D3888	
D1244	D2494	D4031	
D1422	D2497	D4238	
D1423	D2591	D4724	
D1425	D2644	D4911	
D1578	D2645	D5344	
D1907	D2653	D5647	
D2255	D2731		
	D3108		
	D3218		

American grain count (J)	D2260, D4849	hawser twist (J)	D1423, D4849	skein breaking tenacity (J)	D1578, D4848
beam (J)	D2258, D4849	heat shrinkage (J)	D3218, D4849	skein loop length (J)	D2259, D4849
beam set (J)	D2258, D4849	indirect yarn numbering system (J)	D1059, D1907, D2260, D4849	skein shrinkage (J)	D4031, D4849
bench marks (J)	D0076, D4849	initial modulus (J)	D2256, D3218, D4848	skein strength (J)	D1578, D4849
boundary friction (J)	D3412, D4849	integrator, *in textile unevenness testing* (J)	D1425, D4849	slide surface (J)	D3888
break factor (J)	D1578, D4849	jaw face (J)	D0076, D4849	slub (J)	D2255, D4849
breaking force (J)	D1578, D3218, D4849	jaw liner (J)	D0076, D4849	specimen	D2258
breaking tenacity (J)	D2256, D3218, D4849	jaws (J)	D0076, D4849	specular gloss (J)	D3218, D4849
broken filament (J)	D3990, D5647, D4849	kinetic friction (J)	D3108, D4849	spun yarn (J)	D1422, D1423, D4849
bulk shrinkage (J)	D4031, D4849	knot-breaking force (J)	D0204, D4848	stability to thermal oxidation, *for polyolefin monofilaments* (J)	D3218, D4849
bunch (J)	D2255, D4849	knot-breaking strength (J)	D2256, D4848	standard polyolefin monofilament (J)	D3218, D4849
cable twist (J)	D1423, D4849	laboratory sample	D2258	static friction (J)	D3108, D4849
calibrate (J)	D4697, D0076, D4849	laboratory sampling unit	D2494	stick-slip (J)	D3412, D4849
capacity (J)	D0076, D4849	lea, *in cotton yarn* (J)	D1059, D4849	stitch	D0204
case (J)	D2258, D4849	lea, *in linen yarns* (J)	D1059, D2260, D4849	stitch type	D0204
clamp (J)	D0076, D4849	least count (J)	D0076, D4849	stitching	D0204
cockles (J)	D2255, D4849	length between, L_b(J)	D1425, D4849	strand (J)	D1425, D4849
coefficient of friction (J)	D3108, D3412, D4849	length within, L_w(J)	D1425, D4849	strand irregularity (J)	D1425, D4849
coefficient of variation unevenness, CV % (J)	D1425, D4849	linear density (J)	D0861, D1059, D3106, D4849	strength (J)	D1578, D4848
collecting surface (J)	D3888	linear integrator (J)	D1425, D4849	stress (J)	D0076, D4848
colorfastness (J)	D0204, D4849	linear lea (J)	D2260	take-up rollers (J)	D3888
commercial allowance	D3887, D4920, D1907, D2494, D4849	loop-breaking force (J)	D0204, D4848	tape yarn (J)	D3218, D4848
commercial mass (J)	D2494, D2720, D3887, D4849	loop-breaking strength (J)	D2256, D4848	tare (J)	D2494, D4849
commercial moisture regain	D1907, D2494	loopy (J)	D5647, D4849	tenacity (J)	D2256, D4848
cone (J)	D204, D3888, D4849	lot	D2258	tensile testing machine (J)	D0076, D4849
constant-rate-of-extension (CRE) type tensile testing machine (J)	D0076, D1775, D4849, D4964	lot sample	D2258	test skein (J)	D0076, D4849
constant-rate-of-load (CRL) type tensile testing machine (J)	D0076, D1775, D4849, D4964	mean deviation unevenness, U % (J)	D1425, D4849	tex (J)	D0204, D0861, D1059, D2260, D4849
constant-rate-of-traverse (CRT)	D0076, D4849	metric count (J)	D1059, D2260, D4849	thick place (J)	D2255, D4849
		modified worsted system (J)	D4911, D4849	thin place (J)	D2255, D4849
		moisture content	D2494		
		monofilament (J)	D3218, D4849		

type tensile testing machine (J)		navel (J)	D3888	thread holder (J)	D0204, D3693, D4849
core-spun yarn (J)	D0204, D4849	nep (J)	D2255, D4849	ticket number (J)	D0204, D3823, D4849
cotton count (J)	D1059, D2260, D4849	nominal gage length (J)	D0076, D4849	time of integration (J)	D1425, D4849
cotton system (J)	D2645, D4849	open-end spinning machine (J)	D3888	time-to-break (J)	D0076, D4849
cover (J)	D2255, D4849	opening device (J)	D3888	tolerances	D2497, D2644, D2645, D4911
covered yarn (J)	D0204, D4849	opening roller (J)	D3888		
crimp contraction (J)	D4031, D4849	original twist (J)	D1423, D4849	trash removal device (J)	D3888
crimp development medium (J)	D4031, D4849	oven dried	D2494, D4849	true gage length (J)	D0076, D4849
crimp recovery (J)	D4031, D4849	parallel worsted system (J)	D4911	twist (J)	D0204, D1422, D1423, D4849
cut, *in asbestos and glass yarns* (J)	D1059, D2260, D4849	partially oriented yarn (J)	D5344, D4849		
cut, *in wool yarns* (J)	D1059, D2260, D4849	polyolefin (J)	D3218, D4849	twist balance	D0204
denier (J)	D1059, D2260, D4849	polyolefin-material cleanliness (J)	D3218, D4849	twist factor, *TF* (J)	D1422, D1423, D4849
direct yarn numbering system (J)	D1059, D1907, D2260, D4849			twist multiplier, *TM* (J)	D1422, D1423, D4849
direction of twist (J)	D1422, D1423, D4849	polyolefin monofilament (J)	D3218, D4849	twist take-up (J)	D1423, D4849
doffing tube (J)	D3888	primary sampling unit	D2258	typp (J)	D1059, D2260, D4849
draw ratio (J)	D3218, D5344, D4849	production lot	D2258	unevenness (J)	D1425, D4849
draw texturing (J)	D5344, D4849	quadratic integrator (J)	D1425, D4849	unit length of measurement, L, (J)	D1425, D4849
drawing (J)	D3218, D5344, D4849	radian (J)	D3108, D3412, D4849	verify (J)	D0076, D4848
effective carriage mass (J)	D0076, D4849	resistance to ultraviolet radiation (J)	D3218, D4849	winding system (J)	D3888, D4848
effective gage length (J)	D0076, D4849			wool, *generic sense* (J)	D2644
elastomeric yarn (J)	D3106, D4849	response time (J)	D0076, D4849	woolen run (J)	D2260
electrostatic decay half-life (J)	D4238, D4849	resultant yarn number (J)	D1244, D4849	woolen-spun (J)	D2644, D4849
electrostatic propensity (J)	D4238, D4849	rotor (J)	D3888	woolen system (J)	D2644, D4849
elongation (J)	D0204, D2256, D3106, D4848	rotor-type open-end spinning machine (J)	D3888	worsted count (J)	D1059, D2260, D4849
elongation at break (J)	D2256, D3106, D3218, D4848			worsted system (J)	D2645, D4911, D4849
elongation at rupture (J)	D2256, D4848				
end (J)	D2258, D4849	run, *in the American woolen system* (J)	D1059, D2260, D4849	wrap angle (J)	D3108, D3412, D4849
entanglement (J)	D4724, D4849			yarn (J)	D1422, D1423, D4849
evaluator (J)	D1425, D4849	sample	D2258	yarn appearance (J)	D2255, D4849
extension (J)	D2259, D3106, D5344, D4848	sample skein (J)	D2258, D4849	yarn break (J)	D4033
		sampling unit	D2258	yarn fault (J)	D4849, D6197
extension force (J)	D5344	sensitivity (J)	D0076, D4849	yarn fault count (J)	D4849, D6197
fabric package (J)	D2258, D4849	separator (J)	D3888	yarn number (J)	D0204, D1059, D1907, D2260, D4849
feed unit (J)	D3888	sew (J)	D0204, D4849		
fiber channel (J)	D3888			yarn numbering system (J)	D1059, D1907, D2260, D4849
filament yarn (J)	D3822, D4724, D4849				
final twist (J)	D1423, D4849	sewing force (J)	D0204, D4849	yarn package (J)	D2258, D4849
force (J)	D1578, D3106, D4848	sewing thread (J)	D0204, D3693, D3823, D4849		
frayed (J)	D4849, D5647				
friction (J)	D3108, D3412, D4849	shipment (J)	D2494, D4849		
fuzz (J)	D2255, D4849	shrinkage (J)	D0204, D2259, D4849		
fuzzy (J)	D2255, D5647, D4849	single yarn (J)	D1422, D1423, D4849		
glass count (J)	D2260	skein (J)	D1578, D1907, D4849		
gloss (J)	D3218	skein break factor (J)	D1578, D4848, D4849		
grain (J)	D2260, D4849				
grain, *in measuring mass* (J)	D2260, D4849				
greige thread (J)	D0204, D3823, D4849				
grex (J)	D1059, D2260, D4849				
grip (J)	D0076, D4849				
growth (J)	D0204, D4849				

4.20 *D13.59 Fabric Test Methods, General—Total Standards: 21*

D434
D737
D1336
D1777
D2594
D3107
D3786
D3787
D3883
D3939
D3990
D4033
D4034
D4685
D4772
D4850
D4851
D5362
D5430
Z2622Z
Z3840Z

abrasion D4685
abrasion mark (J) D3990
absorption D4772
air permeability (J) D737
air-supported roof (J) D4851
architectural-use (J) D4851
bagging (J) D4850
barre (J) D3990
birdseye (J) D3990
blotch (J) D3990
book fold (J) D4850
bow D3990
braided fabric (J) D4850
broken end (J) D3990
broken filament D3990
broken pick (J) D3990
*† bruise (J) D3990
burlap (J) D4850
bursting strength (J) D3787, D3786
clip mark (J) D3990
cloth (J) D4850
cloth, *any textile fabric* (J) D4850
coarse end (J) D3990
coarse pick (J) D3990
*† coated fabric (J) D4851, D4850
cockles D3990
color bleeding (J) D3990
color contrast (J) D5362
color staining (J) D3990
constant-rate-of-traverse *tensile testing machine* (CRT) D3787
corduroy (J) D4685, D4850
count (J) D3787
course (J) D4850
crack mark (J) D3990
crease (J) D3990
crease mark (J) D3990
crease retention (J) D4850
critical defect (J) D5430
crocking (J) D3990
cross dye effect (J) D3990
crowsfeet (J) D3990
curled selvage (J) D3990
cut (J) D4850
cut selvage (J) D3990
dead cotton D3990
decating mark (J) D3990
defect, *in inspection and grading* (J) D5430
denim (J) D4850
dimensional change (J) D1777
direction of slippage (J) D4034
distortion (J) D3939, D5362
doctor streak (J) D3990
double bow D3990
double hooked bow D3990
double pick (J) D3990
double reverse bow D3990
draw-back (J) D3990
dropped stitch (J) D3990
flexibility (J) D4850
float (J) D3990, D4850
float, *in woven fabric* (J) D4850
frosting (J) D3990
fuzz ball (J) D3990
fuzzy D3990
gage, *in full fashioned hosiery* (J) D4850
gage, *in knitted fabrics* (J) D4850
gage, *in warp knitting* (J) D4850
gaiting (J) D4850
gout (J) D3990
grade (J) D5430, D4850
grade, *in warp knitting* (J) D4350, D4850
growth (J) D2594, D3107
hang pick (J) D3990
hard size (J) D3990
heavy goods (J) D4850
hessians (J) D4850
*† hole (J) D3990
hooked bow D3990
impregnated fabric (J) D4850
inches per rack, IPR (J) D4850
*† inspection (J) D5430
jacket (J) D4850
jerk-in (J) D3990
kink (J) D3990
knitted fabric (J) D3786, D3787, D4850
laid fabric (J) D4850
laminated fabric (J) D4851
let-off mark (J) D3990
lisle (J) D4850
load recovery cycle (J) D1775
long knot (J) D3990
long slug (J) D3990
loom fly (J) D3990
loop tension (J) D1775, D4964
loopy selvage (J) D3990
loose course (J) D3990
major defect (J) D5430
minor defect (J) D5430
mispick (J) D3990
misprint (J) D3990
misregister (J) D3990
miss-knit (J) D3990
mixed end (J) D3990
mixed filling (J) D3990
mussiness (J) D3990
narrow elastic fabric (J) D1775, D4964, D5278
narrow fabric (J) D4850
nep D3990
nonwoven fabric D3786, D3787
permeability (J) D4850
pick (J) D4850
pick count (J) D4850
pick-out mark (J) D3990
piecing (J) D3990
pile (J) D4850
pile retention (J) D4685
pills D3990
pin mark (J) D3990
pinhole (J) D3990
selvage (J) D4850
selvage mark (J) D3990
set mark (J) D3990
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shier (J) D3990
shiner (J) D3990
shoe fold (J) D4850
shuttle mark (J) D3990
sizing (J) D4850
skewness D3990
slack end (J) D3990
slack pick (J) D3990
slack selvage (J) D3990
slam-off (J) D3990
sley (J) D4850
slough-off (J) D3990
slub D3990
slug (J) D3990
smash (J) D3990
snag (J) D5362, D3990, D3939
snagging resistance (J) D5362, D3939
specks (J) D3990
split-stitch (J) D3990
spot (J) D3990
stain (J) D3990
static load (J) D5278
stop mark (J) D3990
streak (J) D3990
stretch woven fabric (J) D4850
stretch yarn D3107
surface contour (J) D4850
surface friction (J) D4850
surface water absorption (J) D4772
tacking cut (J) D3990
take up (J) D3883
tear drop (J) D3990
temple mark (J) D3990
tension-recovery chart (J) D1775, D4964
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tension-supported roof (J) D4851
tenter mark (J) D3990
terry fabric (J) D4772
textile fabric D4850
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texture (J) D4850
thermal character (J) D4850
thick place (J) D3990
thickness (J) D1777
thin filling (J) D3990
thin place (J) D3990
thread break (J) D4033
tight end (J) D3990
tight pick (J) D3990
tight selvage (J) D3990
tight twist end (J) D3990
trammage (J) D3990
trash D3990
tucking defect (J) D3990
tufted fabric (J) D4850
twill weave (J) D4850
uneven dyeing (J) D3990
wale, *in knitted fabrics* (J) D4850
wale, *in woven fabrics* (J) D4850

duck (J)	D4850	plain weave (J)	D4850	warp (J)	D4850
durable-press (J)	D4850	pleat (J)	D4850	warp (J)	D4850
				warp elongation and tension (J)	D1775
dye streak (J)	D3990	plied yarn duck (J)	D4850	warp-faced twill (J)	D4850
dyestain (J)	D3990	porosity (J)	D4850	warp streak (J)	D3990
elastic fabric (J)	D1775, D4850, D4964	pressed-in crease (J)	D4850	warp-to-filling seam (J)	D4033
elastic tape (J)	D4850	press-off (J)	D3990	warp-to-warp seam (J)	D4033
elastic webbing (J)	D4850	pressure (J)	D1777	wash-and-wear (J)	D4850
end (J)	D4850	protrusion (J)	D5362, D3939	washboard (J)	D3990
end out (J)	D3990	rack (J)	D4850	wavy cloth (J)	D3990
extensibility	D4850	reed mark (J)	D3990	wavy face (J)	D3990
extension recovery chart (J)	D1775			weight (J)	D4850
extension-recovery cycle (J)	D1775, D4964			wide elastic fabric (J)	D1775, D4964
fabric roof-system (J)	D4851	reinforced seam (J)	D4033		
fabric stretch (J)	D2594, D3107	resilience (J)	D4850	width, *of circular knit fabrics* (J)	D3787
fatiguing load	D4033	resistance to slippage (J)	D434	width, *of flat knit fabrics* (J)	D3787
filler (J)	D4850	resistance to yarn slippage (J)	D4034, D4033	woven fabric	D3786
filling (J)	D4850	resistance to yarn slippage, *at the seam*,(J)D434, D4033		wrinkle (J)	D3990
filling band (J)	D3990			wrinkle recovery (J)	D4850
*† filling bar (J)	D3990	ribbon (J)	D4850	wrinkle resistance (J)	D4850
filling elongation and tension (J)	D1775				
filling-to-filling seam (J)	D4033	ring (J)	D3990	wrong draw (J)	D3990
fine end (J)	D3990	rope mark (J)	D3990	yarn break (J)	D4033
finger mark (J)	D3990	rough (J)	D3990	yarn crimp	D3883
finished fabric weight (J)	D3990	run, *in knitted fabrics* (J)	D3990	yarn distortion (J)	D1336
finished yield (J)	D3990	sanforizing mark (J)	D3990	yarn slippage (J)	D4034, D4033
finishing bar (J)	D3990	scalloped selvage (J)	D3990	yarn take-up (J)	D3883
flagging (J)	D4033	seam allowance	D4033	yield (J)	D4850
flat duck (J)	D4850	seam mark (J)	D3990		
		section mark (J)	D3990	*† Indicates dual jurisdiction with D13.20.	

4.21 *D13.60 Fabric Test Methods, Specific—Total Standards: 22*

D1388	D3775	D4158
D1424	D3776	D4966
D2261	D3882	D4970
D3511	D3884	D5034
D3512	D3885	D5035
D3514	D3886	D5587
D3773	D4032	
D3774	D4157	

abrasion (J)	D3884, D3885, D3886, D4157, D4158	machine direction (J)	D1388, D1424, D2262, D5587
bending length (J)	D1388	median load (J)	D2261
bow (J)	D3882	modified grab test (J)	D5034
breaking force	D5034, D5035	peak force, in tear testing of fabrics (J)	D2261, D2262, D5587
breaking load	D5034, D5035	pilling resistance (J)	D3511, D3512, D3514, D4970
circular bend (J)	D4032		
constant rate of extension (CRE) textile testing machine	D5034, D5035	pills (J)	D3511, D3512 D3514, D4970
constant rate of load (CRL) textile testing machine	D5034, D5035	raveled strip test (J)	D5035
		skewness (J)	D3882
constant rate of traverse (CRT) textile testing machine	D5034, D5035	stable fabric (J)	D3773
		standard atmosphere for pre-conditioning textiles	D4966, D4970
count, *in woven textile* (J)	D3775		
cross-machine direction	D1388, D1424, D2261 D5587	standard atmosphere for testing textiles	D4966, D4970
		stiffness (J)	D1388, D4032
cut strip test (J)	D5035	stiffness, *with regard to the circular bending of textiles* (J)	D4032
double bow (J)	D3882		
double hooked bow (J)	D3882	strip test (J)	D5035
double reverse bow (J)	D3882	tear resistance, *in textiles* (J)	D1424
elongation	D5034, D5035	tearing energy (J)	D1424
extension (J)	D5034, D5035	tearing force, *in fabric* (J)	D1424, D2261
fabric, *in textiles* (J)	D1388, D1424, D2261 D5587		D2262, D5587
		tearing strength (J)	D2261, D5587
flexural rigidity (j**)	D1388	tearing strength, *in fabrics* (J)	D1424
fuzz	D3511, D3512, D3514, D4970	tensile test	D5034, D5035
		warp tests (J)	D1424
grab test (J)	D5034	weight—as used with fabric (J)	D3776
hooked bow (J)	D3882	width—of a fabric (J)	D3774

integrator (J)	D2261
knitted fabric (J)	D3882
length, *of a fabric* (J)	D3773
length of tear (J)	D1424
width of a raised surface in fabric (J)	D3774
width *of fabric woven on a shuttleless loom* (J)	D3774
woven fabric (J)	D3773

4.22 *D13.61 Apparel—Total Standards: 5*

D4231
D4522
D4523
D4524
D4770

barb (in down) (J)	D4523
barb (n feathers) (J)	D4523
batting (J)	D4770
batting integrity (J)	D4770
crushed feathers (J)	D4523
damaged feathers (J)	D4523
distortion, *in textile batting* (J)	D4770
down (J)	D4523
down fibers (J)	D4523
feather fiber (J)	D4523
feathers (J)	D4523
fiberfill (J)	D4770
filling material (J)	D4523
industry products (J)	D4523
microfiber batting (J)	D4770
needle-punched batting (J)	D4770
nestling down (J)	D4523
nestling feathers (J)	D4523
nonwaterfowel feathers (J)	D4523
oxygen number (J)	D4523
plumage (J)	D4523
plumules (J)	D4523
quill (J)	D4523
quill feathers (J)	D4523
quill point (J)	D4523
quill shaft (J)	D4523
residue (J)	D4523
resin bonded batting (J)	D4770
second-hand filling material (J)	D4523
sheath (J)	D4523
sport shirt, *for boys* (J)	D4231
sport shirt, *for men* (J)	D4231
thermal bonded batting	D4770
unbonded batting (J)	D4770
vane, *in feathers* (J)	D4523
waterfowl feathers (J)	D4523

4.23 *D13.62 Care Labels—Total Standards: 5*

D3136
D3938
D5253
D5489
D6333

absorbent compound (J)	D5253
absorbent pad (J)	D5253
bath mat (J)	D5253
bath rug (J)	D5253
bleach (J)	D3136, D5253
bonnet (J)	D5253
brush (n) (J)	D5253
brush (vt) (J)	D5253
care instructions (J)	D3136, D3938, D5253, D5489
care label (J)	D3136, D5253
care procedure (J)	D3136, D5253
care symbol (J)	D5489
carpet (J)	D5253
carpet sweeper (J)	D5253
chemical wash (J)	D5253
chlorine bleach (J)	D3136
cleaning agent (J)	D3136, D5253
coated fabric	D5253
commercial laundering (J)	D3136, D3938
consumer care (J)	D3136, D3938, D5253
consumer textile product (J)	D3136, D3938, D5489
cylindrical wet-scrub extraction (J)	D5253
detergent (J)	D3136, D5253
dry cleaning (J)	D3136, D3938, D5253
dry extraction cleaning (J)	D5253
dry foam extraction cleaning (J)	D5253
dry solvent (J)	D5253
extraction cleaning (J)	D5253
foam (J)	D5253
foam cleaning (J)	D5253
hand washing (J)	D3136
home laundering (J)	D3136
hot water extraction cleaning (J)	D5253
in-plant cleaning (J)	D5253
ironing (J)	D3136
laundering (J)	D3136, D5253
main components (J)	D3938
non-chlorine bleach (J)	D3136
on-location cleaning (J)	D5253
permanent care label (J)	D3136, D3938, D5489
pile lifting (J)	D5253
pile lofting (J)	D5253
powder cleaner (J)	D5253
pressing (J)	D3136
pretreat (J)	D5253
professional care (J)	D3136, D3938, D5253
refurbish (J)	D3136, D3938
rotary extraction cleaning (J)	D5253
rotary shampoo (J)	D5253
routine maintenance (J)	D5253
rug	D5253
scatter rug (J)	D5253
shampoo (J)	D5253
slipcover	D5253
soap (J)	D3136, D5253
solvent (J)	D5253
solvent relative humidity (J)	D3136
sour (J)	D5253
spot and stain removal (J)	D3136, D5253
spot clean	D5253
stripper	D5253
tag	D3136
upholstered furniture	D5253
upholstery, coated	D5253
upholstery cleaning instructions (J)	D5253
upholstery fabric	D5253
vacuum	D5253
wipe (J)	D5253

4.24 *D13.63 Home Furnishings—Total Standards: 8*

D4720
D4721
D4769
D4852
D5378
D5431
D5432
D5433

attached upholstery fabric (J)	D4852
back coating	D4852
bath sheet (J)	D5433
bath towel (J)	D5433
bedcovering (J)	D4721
bedspread (J)	D4721
blanket (J)	D4721, D5432
cleaning agent	D4852
comforter (J)	D4769, D4721
conventional blanket (J)	D5432
crash towel (J)	D5433
delicate or gentle cycle (J)	D5432
drop (J)	D4721
dust ruffle (J)	D4721
fill leakage (J)	D4769
fingertip towel (J)	D5433
fitted sheets (J)	D5431
flannel (J)	D5431
flat sheet (J)	D5431
flocked blanket (J)	D5432
flounce (J)	D4721
furniture covering (J)	D4852
furniture unit (J)	D4852
group, in upholstered furniture (J)	D4852
huck towel (J)	D5433
knitted fabric	D5378
muslin (J)	D5431
nonwoven blanket (J)	D5432
overall cleaning, for upholstered furniture (J)	D4852
part (J)	D4852
percale (J)	D5431
quilt (J)	D4721
sham (J)	D4721
sheet (J)	D5431
sheet blanket (J)	D5431
shower curtain (J)	D5378
slipcover (J)	D4852
soft wall coverings (J)	D4720
terry towel (J)	D5433
thermal blanket (J)	D5432
throw (J)	D4852
towel (J)	D5433
tufting (J)	D4852
vacuum (J)	D4852
welted seam (J)	D4852
welting (J)	D4852
woven fabric	D5378

4.25 *D13.64 Nonwoven Fabrics—Total Standards: 6*

D5732
D5733
D5734
D5735
D5736

cross-machine direction (J)	D5732
highloft nonwoven fabric (J)	D5736
machine direction (J)	D5732
nonwoven fabric (J)	D1117, D5732, D5733, D5734, D5735, D5736
tearing force (J)	D5735

4.26 *D13.92 Terminology—Total Standards: 2*

D125
D4391

after flame (J)	D123
after flame time (J)	D4391
afterglow (J)	D439
after glow time (J)	D123
burning behavior (J)	D4391
combustible textile (J)	D4391
combustion (J)	D4391
dangerously flammable textile (J)	D4391
embrittlement (J)	D4391
fiber (J)	D123
filament (J)	D123
fire (J)	D4391
flame (J)	D4391
flame resistance (J)	D4391
flame resistant (J)	D4391
flame retardant (J)	D4391
flame retardant (J)	D4391
flame retardant treated (J)	D4391
flame retardant treatment (J)	D4391
flame spread (J)	D4391
flame spread time (J)	D4391
flammability (J)	D4391
flammable textile (J)	D4391
glow (J)	D4391
heat durability (J)	D4391
heat durable (J)	D4391
heat flux (J)	D4391
heat resistance (J)	D4391
heat resistant (J)	D4391
high tenacity fiber (J)	D123
inherent flame resistance (J)	D4391
inherently flame resistant (J)	D4391
kelvin (J)	D123
man-made fiber (J)	D123
man-made staple fiber (J)	D123
manufactured fiber (J)	D123
manufactured staple fiber (J)	D123
noncombustible textile (J)	D4391
nonflammable textile (J)	D4391
practice (J)	D123
self-extinguishing (J)	D4391
smoldering (J)	D4391
specification (J)	D123
test method (J)	D123
textile (J)	D123
textile (J)	D123
textile fiber, *general* (J)	D123
textile fiber, *specific* (J)	D123
weight (J)	D123

4.27 *D13.93 Statistics—Total Standards: 11*

D2905	D4271	D4853			
D2906	D4467	D4854			
D3777	D4686	D4855			
D4270	D4697				
acceptable quality level (J)	D3777, D4271	interaction (J)	D4853	production lot (J)	D4271
acceptance number (J)	D3777, D4271	interference (J)	D4855	random cause (J)	D4467
acceptance sampling (J)	D3777, D4271	interlaboratory testing (J)	D4467	random sampling (J)	D4271, D4854
acceptance testing (J)	D3777, D4271	laboratory sample (J)	D2905, D2906, D3777, D4271, D4854	randomized block experiment (J)	D4853
accuracy (J)	D2905, D2906, D4697, D4855	laboratory sampling unit (J)	D4271	rejection number (J)	D3777, D4271
analysis of variance (ANOVA) (J)	D4854	least difference of practical importance (J)	D4855	replicate (J)	D4853
assignable cause (J)	D4467	limiting quality level (LQL) (J)	D3777, D4271	replicate (J)	D4853
attribute (J)	D4271	lot (J)	D3777, D4271	ruggedness test (J)	D4853, D4855
attribute data (J)	D4271, D4697, D4854	lot sample (J)	D2906, D4854	run (J)	D4853
average (J)	D4853	lot sampling unit (J)	D4271	sample (J)	D2906, D3777, D4271, D4854
Bernoulli distribution (J)	D4686	lot tolerance fraction defective (J)	D3777	sampling plan (J)	D4854
bias (J)	D2905, D2906, D4697, D4855	maintain (J)	D4697	sampling plan result (J)	D4854
binomial distribution (J)	D4686	mean (J)	D4853	sampling unit (J)	D3777, D4271
block (J)	D4853	mean square (J)	D4853	sensitivity criterion (J)	D4270
bulk sample (J)	D4271	measurement value (J)	D4697	sensitivity ratio (SR) (J)	D4855
calibration (J)	D4697	median (J)	D4853	significance level (J)	D2906
chain sampling (J)	D3777	mode (J)	D4853	single sampling (J)	D3777
characteristic (J)	D2906, D4271	moving range (J)	D4697	specimen (J)	D2905, D2906, D4854
coefficient of variation, CV (J)	D2905	nonconfirming (J)	D3777	standard deviation (J)	D2905, D4833
component of variance (J)	D4854	nonconfirming item (J)	D4271	state of statistical control (J)	D4271, D4467
confidence interval (J)	D4855	nonconformity (J)	D3777, D4271	statistic (J)	D4855
confidence level (J)	D2906, D4855	nonparametric (J)	D4270	sum of squares (J)	D4855
confidence limits (J)	D4855	normal distribution (J)	D4686	systematic sampling (J)	D4271
consumer's risk (J)	D3777, D4271	observation (J)	D4271, D4854	test result (J)	D2905, D2906, D4271, D4854
continuous variate (J)	D4271	operating characteristic curve (O C Curve) (J)	D3777	tolerances (J)	D4855
critical difference (J)	D2906	parameter (J)	D2906, D4271, D4855	transformation (J)	D4686
degrees of freedom (J)	D4853, D4854, D4855	parametric (J)	D4270	treatment combination (J)	D4853
determination value (J)	D2905, D4271, D4854	percentage point (J)	D2905, D2906	t-test (J)	D4855
discrete sample (J)	D4271	Poisson distribution (J)	D4686	Type A operating characteristic curve (J)	D3777
discrete variate (J)	D4271	precision, *single operator* (J)	D2905, D2906	Type B operating characteristic curve (J)	D3777
duplicate (J)	D4853	precision, *within laboratory* (J)	D2905, D2906	Type I error (J)	D4853, D4855
duplicate, VT (J)	D4853	precision, *between laboratory* (J)	D2905, D2906	Type II error (J)	D4853, D4855
error of the first kind (J)	D4853, D4855	primary sampling unit (J)	D4271	variable (J)	D4271
error of the second kind (J)	D4853, D4855	probability function, *continuous variate* (J)	D4686	variables data (J)	D4854
experimental error (J)	D4853	probability function, *discrete function* (J)	D4686	variance, *population* (J)	D4854
factor (J)	D4853	probability level (J)	D2906	variance, *sample* (J)	D2905, D4853, D4854
frequency distributon, *of a population* (J)	D4686	process average (J)	D4271	variate	D4271
frequency distribution, *of a sample* (J)	D4686	producer's risk (J)	D3777, D4271	verification (J)	D4697
F-test (J)	D4855			verify (J)	D4697
				verify (J)	D4697

ANNEXES

(Mandatory Information)

A1. GENERIC NAMES AND DEFINITIONS FOR MANUFACTURED FIBERS

A1.1 The following information was taken from: "Generic names and definitions of manufactured fibers," *Code of Federal Regulations*, Title 16, Section 303.7, Jan. 1, 1987, pp 161–163.[4]

acetate—a manufactured fiber in which the fiber-forming substance is cellulose acetate. Where not less than 92 % of the hydroxyl groups are acetylated, the term triacetate may be used as a generic description of the fiber.

acrylic—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of acrylonitrile units

(|CzCH$_2$|CzCH|Cz).

[4] * As amended March 13, 1966.
** Effective Nov. 3, 1969.
*** Effective Sept. 12, 1973.
**** Effective Jan. 11, 1974.
***** Effective Feb. 15, 1974.
****** Effective June 6, 1986.

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**anidex—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 50 % by weight of one or more esters of a monohydric alcohol and acrylic acid, $CH_2|CxCH|CzCOOH$.

****aramid—a manufactured fiber in which the fiber-forming substance is a long-chain synthetic aromatic polyamide in which at least 85 % of the amide (|CzC|CzNH|Cz) linkages

|Ch
O

are attached directly to two aromatic rings.

azlon—a manufactured fiber in which the fiber-forming substance is composed of any regenerated naturally occurring proteins.

glass—a manufactured fiber in which the fiber-forming substance is glass.

metallic—a manufactured fiber composed of metal, plastic-coated metal, metal-coated plastic, or a core completely covered by metal.

***modacrylic**—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of less than 85 % but at least 35 % by weight of acrylonitrile units ($|CzCH_2|CzCH|Cz$), except fiber qualifying under **rubber**, 2, and **anidex.**

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*****novoloid—a manufactured fiber containing at least 85 % by weight of a cross-linked novolac.

******nylon—a manufactured fiber in which the fiber-forming substance is a long-chain synthetic polyamide in which less than 85 % of the amide (|CzC|CzNH|Cz) linkages are

|Ch
O

attached directly to two aromatic rings.

nytril—a manufactured fiber containing at least 85 % of a long-chain polymer of vinylidene dinitrile ($|CzCH_2|CzC(CN_2)|Cz$) where the vinylidene dinitrile content is no less than every other unit in the polymer chain.

***olefin**—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of ethylene, propylene, or other olefin units, except amorphous (noncrystalline) polyolefins qualifying under **rubber**, 1.

*******PBI—a manufactured fiber in which the fiber-forming substance is a long chain aromatic polymer having reoccurring imidazole groups as an integral part of the polymer chain.

***polyester—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of an ester of a substituted aromatic carboxylic acid, including but not restricted to substituted terephthalate units,

$$p\ (|CzR|CzO|CzC|CzC_6H_4|CzC|CzO|Cz),$$
$$\quad\ |Ch\quad\quad\ |Ch$$
$$\quad\ O\quad\quad\ O$$

and para substituted hydroxy-benzoate units,

$$p\ (|CzR|CzO|CzC_6H_4|CzC|CzO|Cz).$$
$$\quad\ |Ch$$
$$\quad\ O$$

rayon—a manufactured fiber composed of regenerated cellulose, as well as manufactured fibers composed of regenerated cellulose in which substituents have replaced not more than 15 % of the hydrogens of the hydroxyl groups.

***rubber**—a manufactured fiber in which the fiber-forming substance is comprised of natural or synthetic rubber, including the following categories:

1. A manufactured fiber in which the fiber-forming substance is a hydrocarbon such as natural rubber, polyisoprene, polybutadiene, copolymers of dienes and hydrocarbons, or amorphous (noncrystalline) polyolefins.

2. A manufactured fiber in which the fiber-forming substance is a copolymer of acrylonitrile and a diene (such as butadiene) composed of not more than 50 % but at least 10 % by weight of acrylonitrile units ($|CzCH_2|CzCH|Cz$).

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The term “lastrile” may be used as a generic description for fibers falling within this category.

3. A manufactured fiber in which the fiber-forming substance is a polychloroprene or a copolymer of chloroprene in which at least 35 % by weight of the fiber-forming substance is composed of chloroprene units ($|CzCH_2|CzC|CxCH|CzCH_2|Cz$).

|
Cl

saran—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 80 % by weight of vinylidene chloride units ($|CzCH_2|CzCCl_2|Cz$).

spandex—a manufactured fiber in which the fiber-forming substance is a long-chain synthetic polymer comprised of at least 85 % of a segmented polyurethane.

********sulfar—a manufactured fiber in which the fiber-forming substance is a long chain synthetic polysulfide in which at least 85 % of the sulfide (-S-) linkages are attached directly to two aromatic rings.

vinal—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 50 % by weight of vinyl alcohol units ($|CzCH_2|CzCHOH|Cz$), and in which the total of the vinyl alcohol units and any one or more of the various acetal units is at least 85 % by weight of the fiber.

vinyon—a manufactured fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 % by weight of vinyl chloride units ($|CzCH_2|CzCHCl|Cz$).

A2. STANDARD TABLES OF CLASSIFICATION OF MANUFACTURED AND NATURAL FIBERS

This annex formerly was published as Standard D 2368. It was first issued in 1965 and was revised in 1971, 1977, and 1978. Fibers are covered in various tables as follows:

Table A2.1
Animal (Protein-Base) Fibers

TABLE A2.1 Animal (Protein-Base) Fibers

Commercial and Biological Name[A]		Use	Geographical Sources
ALPACA WOOL	*Llama glama*	textiles	South America
American ring tail	*Bassariscusbacus astutus*	soft brushes	North America
Angora	See Rabbit, Angora, Mohair		
Badger	*Meles meles*	soft brushes	Asia, Europe
	{ *Camelus dromedarius*	textiles, soft	Asia
CAMEL HAIR	*Camelus bactrianus*	textiles, coarse	Asia
"Camel hair"	See Squirrel	soft brushes	Asia, North America
CASHMERE HAIR	*Caprahircus sp* (Goat)	textiles	Asia
Cattle hair	*Bos taurus*	upholstery	Asia, Europe
"Civet,"" Black Sable"	See Spotted Skunk		
"Fitch"	*Mephitis mephitis et al* (Skunk)	soft brushes	North America
Fox	*Vulpes fulva*	stuffing	North America, Europe
Genet	*Genetta*	soft brushes	Africa, Asia, Europe
Goat hair	*Capra sp*	soft brushes	Asia
Hog bristle	*Sus scrofa*	paint brushes	Asia, North America
Horse hair, body	*Equus caballus*	upholstery, felts	Asia, Europe, North America, South America
Horse hair, mane and tail	*Equus caballus*	upholstery	Asia, Europe
Kolinksy	See Sable, red		
LLAMA WOOL	*Llama glama*	textiles	South America
Mink	See Sable, red		
MOHAIR	*Caprahircus* (Angora goat)	textiles	Asia, Africa, North America
Muskrat, Northern	*Ondatra zibethicus*	textiles	North America, Russia
Muskrat, Southern	*Ondatra rivalicia*	textiles	North America
Ox hair, ear	*Bos taurus*	soft brushes	Asia, Europe, North America
Pony	*Equus caballus*	soft brushes, felts	Asia
RABBIT, COMMON	*Oryctolagus cuniculus*	fur felt	Australia, Europe, Asia, North America
RABBIT, ANGORA	*Oryctolagus cuniculus*	textiles	Europe, North America
Sable, red	*Mustela sibirica* (Kolinksy, China Mink, Jap Mink)	soft brushes, stuffing	Asia
SHEEP WOOL	*Ovis aries et al.*	textiles	all continents
Skunk	See "Fitch"		
Skunk, Spotted	*Spilogale sp*	soft brushes	North America
Squirrel	*Sciurus vulgaris et al.*	soft brushes	Asia, North America
SILK	*Bombyx mori*	textiles	Asia, Europe
SILK, TUSSAH	*Antheraea paphia et al.*	textiles	Asia
VICUNA WOOL	*Llama vicugna*	textiles	South America

[A]The most common names are in capital letters; biological names are in italics.

Table A2.2
Man-Made Fibers

TABLE A2.2 Manufactured Fibers

Commercial or Generic Name	Major Component
Acetate:[A]	Cellulose Acetate:
Acetate	Secondary Acetate
Triacetate	Primary Acetate
Acrylic[A]	Polyacrylonitrile. See also Polyvinyl
Alginate	Metal salts of alginic acid
Anidel[A]	Copolymer of an acrylic-ester and other monomers
Azlon[A]	Modified naturally occurring proteins (including casein, cottonseed, peanut, and soybean)
Cuprammonium, Cupra	See Rayon[A]
Casein	See Azlon[A]
Cellulose Esters	See Acetate[A]
Elastomers	See Rubber,[A] Spandex[A]
Fluorocarbon	Polytetrafluoroethylene
Glass	Fused inorganic oxides
Metallic	Metal or alloy, some plastic-coated or laminated
Modacrylic[A]	Copolymer of acrylonitrile
Nylon:[A]	Polyamide:
Nylon 6	Poly (epsilon-caproamide)
Nylon 11	Poly (omega-undecanamide)

TABLE A2.2 *Continued*

Commercial or Generic Name	Major Component
Nylon 6-6	Poly (hexamethylene adipamide)
Nylon 6-10	Poly (hexamethylene sebacamide)
Olefin[A]	Aliphatic hydrocarbons
Peanut	See Azlon[A]
Polyacrylic	See Acrylic[A]
Polyamide	See Nylon[A]
Polypeptide	See Nylon[A]
Polyester[A]	Condensation polymer of a dihydric alcohol and terephthalic acid
Polyethylene	See Olefin[A]
Polyurethane	See Spandex[A]
Polyvinyl	Copolymer of vinyl chloride and vinyl acetate Copolymer of vinyl chloride and acrylonitrile After-chlorinated polyvinyl chloride Copolymer of vinylidene chloride and other monomers (saran) Also see Acrylic[A]
Protein-Base Fiber	See Azlon[A]
Regenerated Cellulose	See Rayon[A]
Rayon:[A]	Regenerated Cellulose:
Cuprammonium	Cellulose regenerated by Cuprammonium process
Saponified acetate	Saponified cellulose acetate
Viscose	Cellulose regenerated by viscose process including regular and newer types as high-strength, high-wet modulus, cellular, and special cross-section and cross-linked rayons.
Rubber:[A]	Natural or synthetic polymers:
Natural	Polyisoprene
Synthetic	Various elastoprenes Also see Elastomer, and Practice D 1418[B]
Saponified Acetate	See Rayon[A]
Saran[A]	Poly (vinylidene chloride) Also see Polyvinyl
Soybean	See Azlon[A]
Spandex[A]	Segmented polyurethane
Vinal[A]	Acetal of poly (vinyl alcohol)
Vinyl Acetate	See Polyvinyl
Vinyl Chloride	See Polyvinyl
Vinylidene Chloride	See Polyvinyl, Saran[A]
Vinyon[A]	Poly(vinyl chloride)
Viscose	See Rayon[A]
Zein	See Azlon[A]

[A]Generic names specified by the Federal Trade Commission: defined fully in Annex A1 of Terminology D 123.
[B]Practice D 1418.

Table A2.3
Mineral Fibers

TABLE A2.3 Mineral Fibers

Commercial and Mineralogical Name		Chemical Description	Geographical Sources
ASBESTOS	Chrysotile	magnesium silicate	Canada, Russia
	Crocidolite	iron silicate	South Africa, Australia

Table A2.4
Vegetable Fibers: Seed and Fruit-Hair

TABLE A2.4 Vegetable Fibers: Seed and Fruit-Hair

Commercial and Botanical Name[A]		Staple Length, in.	Geographical Sources
Akund	*Calotropis gigantes* *Gossypium, various sp*		Asia
COTTON	*Gossypium sp*		
1. American Upland	*Gossypium hirsutum*	¾ to 1 7/16	all continents
2. Asiatic cultivated			
a. Chinese	*Gossypium arboreum*	⅜ to 1	China
b. Indian	*Gossypium arboreum* *Gossypium herbaceum*	⅜ to 1	India
c. Levantine	*Gossypium herbaceum*	½ to 1	Asia
3. Extra-long staple barbadenses:			
a. Egyptian	*Gossypium barbadense*	1⅛ to 1⅝	Egypt, Sudan, Peru
b. American Egyptian	*Gossypium barbadense*	1⅜ to 1½	United States

TABLE A2.4 *Continued*

Commercial and Botanical Name[A]		Staple Length, in.	Geographical Sources
c. Sea Island	*Gossypium barbadense*	1½ to 2	West Indies
4. Medium staple, semi-rough barbadenses:			
a. Tanguis	*Gossypium barbadense*	1⅛to 1¼	Peru
b. Ishan	*Gossypium barbadense*	1⅛to 1¼	West Africa
c. Ashmouni (uppers)	*Gossypium barbadense*	1 1/16 to 1⅛	Egypt
5. Short staple, rough barbadenses:			
a. Iquitos	*Gossypium barbadense*	1 to 1 1/16	Peru
b. Lengupa	*Gossypium barbadense*	15/16to 1 1/16	Colombia
6. Perennial tree cottons:			
a. West Indian	*Gossypium hirsutum var Marie-Galante*	1⅛ to 1⅜	West Indies
b. Sertao and Serido	*Gossypium hirsutum var Marie-Galante*	1⅛ to 1⅜	Brazil
KAPOK	*Ceiba pentandra*	¾to ¼	Tropics
Milkweed Floss	*Asclepias various sp*	¾to ¼	North America
Ozone fiber	*Asclepias sp incarnata*		United States
Pochote	*Ceiba aesculifolia*		Mexico
Samchu	*Chorisia species*		South America

[A]Preferred or most common names are in capital letters; botanical names are in italics. The abbreviation *sp* is for the word "species," the subdivisions of a genus.

Table A2.5
Vegetable Fibers: Bast and Leaf

TABLE A2.5 Vegetable Fibers: Bast and Leaf

NOTE 1—The physical origins and the botanical classifications in Tables A2.4, A2.5, and A2.6 were reviewed in 1960 and 1963 by Crops Research Division, Cordage Fibers Section, Agricultural Research Service, U.S. Department of Agriculture.

Commercial and Botanical Name[A]		Description	Geographical Sources
ABACA	*Musa textilis* Neé	hard leaf fiber	Philippine Islands, Central America, Borneo, Sumatra
Abutilon avcennae Gaertn	See *Abutilon theophrasti* Medic medii		
Abutilon longicuspe	Zada buack	coarse bast fiber	
Abutilon periplocifolium	Maholtine	coarse bast fiber	
Abutilon theophrasti Sweet Medic medii	CHINESE JUTE	coarse bast fiber	China
Aechmae magdalenae André	*Pita floja*	fine leaf fiber	Central and South America
AFRICAN SISAL	*Agave sisalana*, Perrine & Engelm	hard leaf fiber	
Agave cantala Roxb	CANTALA	hard leaf fiber	East Indies, Philippine Islands
Agave cocui Trel	Dispopo	coarse leaf fiber	
Agave hexapetala Jacq	Cocuiza	coarse leaf fiber	
Agave deweyana Trel	Zapupe larga	hard leaf fiber	Mexico
Agave falcata Engelm	Guapilla	hard leaf fiber	Mexico
Agave fourcroydes Lem	HENEQUEN	coarse leaf fiber	Mexico, Cuba, Australia
Agave funkiana Koch& Bouché	JAUMAVE ISTLE	hard leaf fiber	Mexico
Agave lespinassei Trel	Zapupe fuerte	hard leaf fiber	Mexico
Agave letonae F. W. Taylor	SALVADOR SISAL	coarse leaf fiber	El Salvador
Agave lophanta var. *poselgeri* (Salm-Dyck) Berger	TULA ISTLE	hard leaf fiber	Mexico
Agave pesa-mulae Trel	Pata de mula, pie de mula	hard leaf fiber	Mexico
Agave pseudotequilana Trel	Mescal	hard leaf fiber	Mexico
Agave sisalana Perrine& Engelm	SISAL	hard leaf fiber	Mexico, Brazil, Kenya, Tanganyika, Uganda, Angola, Mozambique, Haiti, Java, Sumatra
Agave striata Zucc	Espandinin	hard leaf fiber	Mexico
Agave tequilana Weber	MESCAL	hard leaf fiber	Mexico
Agave zapupe Trel	ZAPUPE	hard leaf fiber	Mexico
Ake-ire	*Urenia lobata* Cav	bast fiber	
Aloes creole			
Aloes fiber			
Aloes malgache	*See Furcraea gigantea* Vent true aloe is not a fiber plant		
Ambari	*Hibiscus cannabrius L*	coarse bast fiber	
AMERICAN HEMP	*Cannabis sativa L*	bast fiber	
Ananas comosus L. (Merr)	PINEAPPLE FIBER	fine leaf fiber	West Indies, Philippine Islands
Apocynum sp	Kendyr	soft bast fiber	Russia
Aramina	*Urena lobata* Cav	bast fiber	
ARGENTINE FLAX	*Linum usitatissium L*	soft bast fiber	
Arghan	*Aechmea magdalenae* André		
Asclepias incurnata L	Swamp milk weed	soft bast fiber	United States
AUSTRIAN FLAX	*Linum usitatissimum L*		
AUSTRIAN HEMP	*Cannabis sativa L*		
Awasthe hemp	*Hibiscus cannabinus L* (not hemp)	bast fiber	
BALTIC FLAX	*Linum usitatissimum L*		

TABLE A2.5 *Continued*

Commercial and Botanical Name[A]		Description	Geographical Sources
Bamia	*Urena lobata* Cav		
BANANA	*Musa sapientum L*	leaf fiber	
Banana yucca	*Yucca mohavensis* Sarg		
Ban ochra	*Urena lobata* Cav		
Bariala	*Sida micrantha* Schrank		
Barreta	*Samuela carnerosana* Trel		
BEAR GRASS	*Nolina sp, Yucca sp*		
BELGIAN FLAX	*Linum usitatissimum L*		
Benares hemp	*Crotalaria juncea L* (not hemp)		
Benares sunn	*Crotalaria*		
Billbergia infuscata[B]	Infuscata	soft leaf fiber	South America
Bimli jute			
Bimli patam }	*Hibiscus cannabinus L* (not jute)		
Boehmeria nivea (L) Gaud	RAMIE, China grass	soft bast fiber	Japan, China, Brazil, United States
Bohemian-Moravian Flax	*Linum usitatissimum L*		
Bolo-bolo	*Urena lobata* Cav		
Bombay aloe	*Furcraea gigantea* Vent (not true aloe)		
Bombay hemp	*Crotalaria jungea L* (not hemp)		
Bowstring hemp	*Sansevieria sp* (not hemp)		
Brazilian flax	*Linum usitatissimum L*		
Brazilian jute	*Corchorus sp* (*Hibiscus* and *Urena* are not jute)		
Bromelia magdalenae	See *Aechmea magdalenae* André		
Bromelia karatas L	Gravata	soft leaf fiber	Brazil
Bromelia laciniosa Mart& Schult	Macambira	soft leaf fiber	Brazil
Bromelia longissima	*Aechmea magdalenae* André	soft leaf fiber	Brazil
Bromelia sagenaria	*Pseudaranus sagenarius* (Arruda) Camargo	soft leaf fiber	Brazil
Broom fiber	*Cystisus scoparius*(L) Link, and/or *Spartium junceum* L		
Brown hemp	*Crotalaria juncea L* (not hemp)		
Bulgarian flax	*Linum usitatissimum L*		
Bulgarian hemp	*Cannabis sativa L*		
Cabulla	*Furcraea cabuya* Trel		
Cabuya	*Furcraea cabuya* Trel		
Cabuya blanca			
Cabuya blancho			
Cabuya sin espina	*F. cabuya* var. *integra* Trel		
Cadillo			
Caesar weed }	*Urena lobata* Cav		
Calotropis gigantea Dry& Ait	Akund		
CANADIAN FLAX	*Linum usitatissimum L*		
Canamo			
Canamo }	Spanish word for hemp		
Candilla			
Candillo }	*Urena lobata* Cav		
Canhamo	*Urena lobata* Cav		
Cannabis sativa L	HEMP	soft bast fiber	all temperate zones
CANTALA	*Agave cantala* Roxb; differs from maguey in retting		
CAROA, *Carăua*	*Neoglaziova variegata* Mez		
Carrapicho	*Urena lobata* Cav		
Cebu hemp	*Musa textilis* Née (not hemp)		
CEBU MAGUEY	*Agave cantala* Roxb (retted differently from Cantala)		
Cephalonema sp	Punga	bast fiber	Belgian Congo
Chanvre	French word for hemp		
Chaparral yucca	*Hesperoyucca whipplei* (Torr) Trel		
CHILEAN FLAX	*L. usitatissimum L*		
CHILEAN HEMP	*Cannabis sativa L*		
China grass	*Boehmeria nivea* (*L*) Gaud		
Chinese hemp	*Cannabis sativa L*		
CHINESE JUTE	*Abutilon theophrasti* Medic Medii		
Chingma	*Abutilon theophrasti* Medic		
Chino azul	*Agave tequilana* Weber		
Chino bermejo	*Agave palmaris* Trel		
Chique-chique	*Leopoldinia piassaba* Wallace& Archer		
Chuchao	*Furcraea andine* Trel		
Coconada hemp	*Crotalaria juncea L* (not hemp)		
Cocuiza	*Furcraea humboldtiana* Trel *F hexapetalla*, (Jacq) Urb		
Cocuiza mansa	*Furcraea gigantea* Vent		
CONGO JUTE	*Urena lobata* Cav (not jute)	bast fiber	Belgian Congo, Brazil, Argentina, Venezuela, Cuba

TABLE A2.5 *Continued*

Commercial and Botanical Name[A]		Description	Geographical Sources
Corchorus capsularis L	JUTE (white jute)	soft bast fiber	Pakistan, India
Corchorus olitorius L	TOSSA, DAISEE (jutes)	soft bast fiber	Pakistan, India
COURTRAI FLAX	*L. usitatissimum L*		
Cousin rouge	*Urena lobata* Cav		
Crotalaria juncea L	SUNN (not hemp)	hard bast fiber	India
Cuban jute	*Urena* sp. *Malva* sp *Sida* sp (not jute)		
Cuban sisal	*Agave fourcroydes* Lem		
Culut culutan	*Urena lobata* Cav		
Cytisus scuparius (L) Link	Broom fiber, Spanish broom	soft bast fiber	Italy, Spain
Da	*Hibiscus cannabinus L*		
DAISEE JUTE	*Corchorus olitorius L*		
Davao hemp	*Musa textiles Nèe* (not hemp)		
Deccan hemp	*Hibiscus cannabinus* (not hemp)		
Dha	*Hibiscus cannabinus L*		
Dispopo	*Agave cocui* Trel		
Dutch flax	*Linum usitatissimum L*		
(Blue Dutch)	*Linum usitatissimum L*		
(White Dutch)	*Linum usitatissimum L*		
EGYPTIAN FLAX	*Linum usitatissimum L*		
Eire flax	*Linum usitatissimum L*		
Ensete edulis (Gmel) Horan	Musa ensete Gmel		
Escobilla	*Sida sp*		
Espadinum	*Agave striata* Zucc		
ESTHONIAN FLAX	*Linum usitatissimum L*		
FIQUE	*Furcraea macrophylla* Baker		
FLAX	*Linum usitatissimum L*		
FLEMISH FLAX	*Linum usitatissimum L*		
FORMIO	*Phormium tenax* Forst		
French hemp	*Cannabis sativa L*		
French flax	*L. usitatissimum L*		
Furcraea andina Trel	Chuchao	hard leaf fiber	Ecuador
Furcraea cabuya Trel	Cabuya	hard leaf fiber	Central America
Furcraea cubensis	Cabulla	hard leaf fiber	Haiti, Cuba, Venezuela, Dominican Republic
Furcraea geminispina Jacobi	Cocuiza	hard leaf fiber	Venezuela
Furcraea gingantea Vent	Piteira, cocuiza mansa	hard leaf fiber	Mauritius, Venezuela, Brazil, Tropics
Furcraea hexapetala (Jacq) Urb	Furcraea cubensis	hard leaf fiber	Haiti, Cuba, Venezuela, Dominican Republic
Furcraea hemboldtiana Trel	Cocuiza	hard leaf fiber	Venezuela
Furcraea macrophylla Baker	FIQUE	hard leaf fiber	Colombia
Galla	Musa ensete-Ensete edulis (Gmel) Horan		
Gambo hemp	*Hibiscus cannabinus L* (not hemp)		
German flax	*Linum usitatissimum L*		
German hemp	*Cannabis sativa L*		
Gombo hemp	*Hibiscus cannabinus L* (not hemp)		
Grand cousin	*Urena lobata* Cav		
Grand mahot cousin	*Urena lobata* Cav		
Gravata	*Bromelia Karatus L*		
Guapilla	*Agave falcata* Engelm		
GUAXIMA	*Urena lobata* Cav		
Guaxima roxa	*Urena lobata* Cav		
Guaxima vermehla	*Urena lobata* Cav		
Guiazo	*Urena lobata* Cav		
HAITIAN SISAL	*Agave sisalana* Perrine& Engelm		
Hanf	German word for hemp		
HEMP	*Cannabis sativa L*		
HENEQUEN	*Agave fourcroydes* Lem		
Hennup	Dutch word for hemp		
Hesperaloe funifera (Koch) Trel	ZAMANDOQUE	hard leaf fiber	Mexico
Hesperoyucca whipplei (Torr) Trel	YUCCA	hard leaf fiber	United States
Hibiscus cannabinus L	KENAF, MESHTA, Ambari, Bimlipatam, Awasthe, Deccan, Dha, Gambo	bast fiber	Russia, Persia, India, South America, United States, Cuba
Hibiscus abelmoschus L	Musk hemp	soft bast fiber	India
Hibiscus esculentus L	Ochra	soft bast fiber	United States
Hibiscus ferax Hook	MESHTA	soft bast fiber	India, Brazil
Hibiscus kitaibelifolius St Hil	Juta paulista	soft bast fiber	Brazil
Hibiscus radiatus[C]	Papoula de St Francis	soft bast fiber	Brazil
Hibiscus sabdariffa L	ROSELLA	soft bast fiber	Java, Brazil
HUNGARIAN FLAX	*Linum usitatissimum L*		
HUNGARIAN HEMP	*Cannabis sativa L*		
Ife hemp			
Ifé	*Sansevieria sp* (not hemp)		
ILLINOIS HEMP	*Cannabis sativa L*		
Indian hemp (United States)	*Apocynum cannabinum L* (not hemp)		
Indian hemp (India)	Several unrelated plants (not hemp)		

TABLE A2.5 *Continued*

Commercial and Botanical Name[A]		Description	Geographical Sources
	Crotalaria sp and *Hibiscus sp* (Examples are Ambari, Benares hemp, Itarsi, Sunn)		
Infuscata	*Billbergia infuscata*[B]		
IRISH FLAX	*Linum usitatissimum L*		
ISTLE	Several *Agave sp* (word is a generic Mexican term)		
IXTLE }			
Istle Jaumave	*Agave funkiana* Koch& Bouché		
Istle, Palma	*Samuela carnerosana* Trel		
Istle Pita	*Yucca treculeana* Carr		
Istle Tula	*Agave lophanta* var *poselgeri* (Salm-Dyck) Berger		
Italian flax	*Linum usitatissimum L*		
ITALIAN HEMP	*Cannabis sativa L*		
Itarsi hemp	*Crotalaria juncea L* (not hemp)		
Ixtli	*Hesperaloe funifera* (Koch) Trel		
JAUMAVE ISTLE			
Jaumave			
Jaumave lechiguilla	*Agave funkiana* Koch& Bouché		
JAVA CANTALA	*Agave cantala* Roxb different retting from maguey		
Java jute	*Hibiscus sabdariffa L* (not jute)		
JAVA SISAL	*Agave sisalana* Perrine& Engelm		
Jirica	*Nolina sp*		
Jubblepore hemp	*Crotalaria juncea L* (not hemp)		
Juta paulista	*Hibiscus kitaibali folius* St Hil		
JUTE	*Corchorus capsularis L* and *Corchorus olitorius L*		
KENAF	*Hibiscus cannabinus L*		
Kendyr	*Apocynum sp*		
KENTUCKY HEMP	*Cannabis sativa L*		
LATVIAN FLAX	*Linum usitatissimum L*		
Lechuguilla (Tula istle)	*Agave lophanta* var *poselgeri* (Salm-Dyck) Berger		
Letona	*Agave letonae* F. W. Taylor		
LINEN	FLAX, *Linum usitatissimum L*		
Linun usitatissimum L	FLAX	soft bast fiber	North and South Temperate Zones
LITHUANIAN FLAX			
LIVONIAN FLAX	*Linum usitatissimum L*		
Luffa gourd	*Linum usitatissimum L*		
Luffa	*Luffa sp*		
Loofah			
Macambira	*Bromelia laciniosa* Mart& Schultz *L*		
Madagascar bass	*Vonitra sp*		
Madras hemp	*Crotalaria juncea L* (not hemp)		
Maguey	Latin American term applied to many species of *Agave*		
MAGUEY (CEBU)	*Agave cantala Roxb*		
Maguey (Peru)	*Furcraea macrophylla* Baker		
Maguey (Cuba)	*Furcraea hexapetalla* (Jacq) Urb		
Maholtine	*Abutilon periplocifolium* Sweet		
Malva	Latin American term applied to several *Malvaceae*		
MALVA	*Sida micrantha* Schrank		
Malva blanca	*Urena lobata* Cav		
Malva listro			
Malva risco }	*Sida micrantha*Schrank		
Malva roxa	*Urena lobata* Cav		
Malva velluda	*Malache malacophylla* (Néc& Mart) Stand		
Malvas	*Urena lobata* Cav		
MANCHURIAN FLAX	*Linum usitatissimum L*		
MANCHURIAN HEMP	*Cannabis sativa L*		
Manila	*Musa textilis* Née (not hemp)		
Manila hemp	*Musa textilis* Née (not hemp)		
Manila maguey	*Agave cantala* Roxb		
Mano largo	*Agave palmaris* Trel		
Mauritius hemp	*Furcraea gigantea* Weber (not hemp)		
Mazatlan hemp	*Agave tequilana* Weber (not hemp)		
MESCAL	Fibre mixture, *Agave sp*		
Mescal maguey	*Agave tequilana* Weber		
MESHTA	*Hibiscus cananbinus* L H *ferax* Hook	soft bast fiber	India
Mexican sisal	*Agar fourcroydes* Lem		

TABLE A2.5 *Continued*

Commercial and Botanical Name[A]		Description	Geographical Sources
Milkweed fiber	*Ascelpias sp* (bast)	bast fiber, also (see Sec. I)	
		seed hair	
Moorva	*Sansevieria sp*		
Musk hemp	*Hibiscus abelmoschus L* (not hemp)		
Musa ensete Gmel	Ensete edulis (Gmel) Horan	coarse leaf fiber	Ethiopia
Musa sapientum L	Banana fiber	coarse leaf fiber	Tropics
Musa textilis Née	ABACA, manila	coarse leaf fiber	Philippine Islands, Borneo, Sumatra
Nanas sabrong	*Agave cantala*, Roxb		
Natal hemp	*Furcraea gigantea* Vent (not hemp)		
Neoglaziovia variegata Mez	CAROA caraua	hard leaf fiber	Brazil
NEW ZEALAND FLAX	*Linum usitatissimum L*	This is true New Zealand flax,	
		not to be confused with	
		Phormium.	
New Zealand flax	*Phormium tenax* Forst phormium or formio		
New Zealand hemp }	(not flax or hemp)		
NORTH IRELAND FLAX	*Linum usitatissimum L*		
Nolina sp	BEAR GRASS	hard leaf fiber	Southwest United States, Mexico
Ochra	*Hibiscus esculentus L*		
Olona	*Touchar dia latifolia* Gaud		
Ototo grande	*Urena lobata* Cav		
OREGON FLAX	*Linum usitatissimum L*		
Paka	*Urena lobata* Cav		
Palma	*Samuela carnerosana* Trel		
Palma barreta	*Samuela carnerosana* Trel		
PALMA ISTLE }			
Palmilla	*Yucca elata* Engelm		
Palmyra	*Borassus flabelifer L*		
Panama hat palm	*Carludovica palmata* R& P (not a palm)		
Pangane	*Sansevierid Kirkii* Bak (not hemp)		
Pangane hemp			
Papoula de St Francis	*Hibiscus ferax* Hook		
Pata de mula	*Agave pes-mulae* Trel		
Pavonia malacophylla Wright			
Pavonia schimperiana Hochst & A. Rich			
Pavonia tomentosa Hochst & A. Rich	*Malva relludo* UACIMA	bast fiber	Brazil
PERUVIAN FLAX	*Linum usitatissimum*		
Phillibit black hemp	*Crotalaria juncea L* (*C tenuifolia* Roxb) (not hemp)		
Philippine maguey	*Agave cantala* Roxb		
PHORMIUM	*Phormium tenax* Forst		
Phormium tenax Forst	PHORMIUM	hard leaf fiber	Argentina, Chile, New Zealand, St. Helena
Pie de mula	*Agave pes-mulae* Trel		
Pineapple fibre (pina)	*Ananas comosus (L)* Merr		
Pineapple (wild)	*Aechmea magdalenae* André		
Pita	Latin-American name for many different hard fibers		
Pita floya (floia)	*Aechmea magdalenae* André		
PITA ISTLE	*Yucca treculeana* Carr		
Pita palma }			
PITEIRA	*Furcraea gigantea* Vent		
Pitre (peetray)	*Furcraea hexapetala* (Jacq) Urb		
POEPOES	*Agave cantala* Roxb		
POLISH FLAX	*Linum usitatissimum L*		
POLISH HEMP	*Cannabis sativa L*		
Polompom	*Thespesia lampas* Dalz& Dalz & Gibs		
Pochote	Ceiba aesculifolia (H.B.K.) Britt & F. G. Bak		
Pseudananas sagenarius (Arruda) Camargo	*Bromelia sagenaria*	soft leaf fiber	Brazil
Punga	*Cephalonema sp*	bast fiber	Belgian Congo
Queensland hemp	*Sida rhombifolia L* (not hemp)		
RAMIE	*Boehmeria nivea L* Gaud		
RATTAN	*Calamus sp*		
Rhea	*Boehmeria nivea L* Gaud		
ROSELLE, rosella	*Hibiscus sabdariffa L*		
ROUMANIAN FLAX	*Linum usitatissimum L*		
ROUMANIAN HEMP	*Cannabis sativa L*		
RUSSIAN FLAX	*L. usitatissimum L*		
RUSSIAN HEMP	*Cannabis sativa L*		
Russian siretz	*Cannabis sativa L*		
Samandoca	*Hesperaloe funifera* (Koch) Trel		

TABLE A2.5 *Continued*

Commercial and Botanical Name[A]	Description	Geographical Sources
Samuela carnerosana Trel	PALMA ISTLE	leaf fiber	Mexico
Salvador henequen	*Agave letonae* F. W. Taylor		
SAN SALVADOR SISAL }			
Sansevieria cylindrica Boj	Ifé	hard leaf fiber	Africa
Sansevieria Kirkii Bak	Pangane	hard leaf fiber	South Africa
Sansevieria sp	Bowstring hemp (not hemp)	hard leaf fiber	Florida
SANSEVIERIA	*Sansevieria sp*	hard leaf fiber	Cuba
Sansevieria trifasciata Prain		hard leaf fiber	Cuba
Scaahuista	*Nolina sp*		
Scioa	*Ensete edulis* (Gmel) Horan		
Seonie hemp	*Crotalaria juncea L* (not hemp)		
Sida micrantha Schrank	Escobilla	soft bast fiber	India, Australia, Brazil
Sidamo	*Ensete edulis* (Gmel) Horan		
Sida rhombifolia L	Queensland hemp (not hemp)		Australia
Silk grass	*Aechema magdalena* André		
SISAL	*Agave sisalana* Perrine& Engelm		
Sisal weisz	*Agave fourcroydes* Lem		
Soap weed	*Yucca glauca* Nutt		
Soft leaf fiber	*Pseudananas sagenarius* (Arruda) Camargo		
SOUDAN SISAL	*Agave sisalana* Perriné& Engelm		
Spanish broom	*Cytisus scoparius (L)* Link		
Spartium junceum L	Brom fibre		Southern Europe
Spanish dagger	*Yucca macro carpa* (Torr) Coville		
St Francis poppy	*Hibiscus ferax* Hook		
St Helena hemp	*Phormium tenax* Forst (not hemp)		
SUNN	*Crotalaria juncea L*		
Swamp milkweed	*Asclepias inca nata L*		
Syrian hemp	*Cannabis sativa L*		
TAMPICO	*Agave funkiana* Koch& Bouché, and A. *lophantha* var *poselgeri* (Salm-Dyck) Berger		
TEQUILA	*Agave tequilana* Weber		
Thespesia lampas Dalz& Dalz & Gibs	Polom pom	soft bast fiber	Indochina
Thespesia populnea Sol.& Correa			
Tientsin jute	*Abutilon theophrasti* Medic Medii (not jute)		
Toja	*Urena lobata* Cav		
TOSSA	*Corchorus olitorius L*		
Touchardia latifolia Gaud	Olona	soft bast fiber	Hawaii
TULA ISTLE	*Agave lophantha* var *poselgeri* (Salm-Dyck) Berger		
Uacima	*Urenal lobata* Cav		
Uaixima			
Urena lobata Cav	CONGO JUTE, GUAXIMA		Belgian Congo, Venezuela, Brazil, United States, Cuba, Argentina
Urena sinuata Wedd	Cuban jute, Kunjia		Cuba, Bengal
Urtica nivea L	RAMIE, Boehmeria nivea (L.) Gaud		China
Victoria sisal	*Agave fourcroydes* Lem		
Warangel hemp	*Crotalaria juncea L* (not hemp)		
WISCONSIN HEMP	*Cannabis sativa L*		
Yacci	*Agave sisalana* Perrine& Engelm		
Yaxi			
Yucatan sisal	*Agave fourcroydes Lem*		
YUCCA[D]		hard leaf fiber	
Yucca angustifolia[E]	BEAR GRASS, soap weed		
Yucca glauca Nutt	BEAR GRASS, soap weed		
Yucca treculena Carr	PITA ISTLE		
Yucca[D]			
YUGOSLAVIAN FLAX	*Linum usitatissimum L*		
YUGOSLAVIAN HEMP	*Cannabis sativa L*		
Zada buack	*Abutilon longicuspe* Hochst& A. Rich		
Zamandoque	*Hesperaloe funifera* (Koch) Trel		
ZAPUPE[E]	*Agave zapupe* Trel		

[A] See Footnote[A] of Table A2.4.

[B] Not found in botanical literature.

[C] Authority cannot be determined.

[D] Many Yucca species yield fiber; the principal ones are included in this table.

[E] Many Agave species yield fiber known as zapupe.

Table A2.6
Vegetable Fibers: Palm and Miscellaneous

TABLE A2.6 Vegetable Fibers: Palm and Miscellaneous

Commercial and Botanical Name[A]		Description	Geographical Sources
Acrocomia sp	Corojo	palm leaf fiber	South America, West Indies
African fiber	*Chamaerops humilis L*	palm leaf segments	North Africa
Alfa	*Stipa tenacissima L*	grass leaves	Mediterranean
Aren	*Arenga pinnata* (Wurmb) Merr	palm fiber	Java
Arenga pinnata (Wurmb.) Merr	Aren	palm fiber	Java
Astrocaryum tucuma Mart	Tecum, tucum; when mixed with *Bactris setosa* Mart	palm leaf fiber	Brazil
Attalea funifera Mart	Bahia bass	plam leaf-base fiber	Brazil
Bactris sp	Mocoro	palm fiber	South America
Bactris setosa Mart	See Astrocaryum tucuma Mart	palm fiber	Brazil
Bahia bass			
Bahia piassava	*Attalea funifera* Mart	palm leaf-base fiber	Brazil
Bamboo	*Bambus sp*	stem segments	Tropics
Bambusa sp	Bamboo		
Bass	*Attalea funifera* Mart *Leopoldina piassaba* Wallace & Archer *Raphia sp Vonitra sp*	palm fiber	Tropics
Bassine	*Borassus flabellifer L*	palm leaf-stem fiber	India
Borassus flabellifer L	Palmyra bassine	palm leaf-stem fiber	India
Broom corn	*Sorghum bicolar* (*L*) Moench. (*S* technicum Batt & Trab)	flower head	United States
Broom root	*Muhlenbergia macoura* (H.B.K.) Hitchc	roots	Mexico
Buntal	*Corypha utan* Lam	palm fiber	East Indies
Buri	*Corypha utan* Lam	palm fiber	East Indies
Cabo negro	*Arenga pinnata* (Wurmb) Merr	palm fiber	Philippines
Calamas sp	Rattan	stems	Oriental Tropics
Carludovica palmata R& P	Palm hat plant (not a palm)	leaf segments	Ecuador
Caryota urens L	Kittool	palm fiber	Asia, Madagascar
Cattail fiber	*Typha sp*	pappus bristles	United States
Chamaerops humilis L	Crin vegetal	palm leaf segments	North Africa
Chinese fan palm	*Livistona chinensis* R Br	palm leaf segments	East Asia
Chinese mat rush	*Lepironia mucronata*L. C. Rich	stems	East Asia
Coconut fiber	*Cocos nucifera L*	nut husk fiber	Tropics
Cocos nucifera L	Coir	nut husk fiber	Tropics
Coir	*Cocos nucifera L*	nut husk fiber	Tropics
Corojo	*Acrocomia sp*	palm leaf fiber	Cuba
Corypha utan Lam	Buntal	palm leaf segments	Philippines
Crin vegetal	*Chamaerops humilis L*	palm leaf segments	North Africa
Dum	*Hyphaene thebacia* Mart	palm leaf fiber	Arabia
Eel grass	*Zostera marina L*	leaves	Nova Scotia, Newfoundland
Ejoo	*Arenga pinnata* (Wurmb) Merr	palm fiber	Malaysia
Esparto	*Stipa tenacissima L*	leaves	Mediterranean
Gemuti	*Arenga pinnata* (Wurmb) Merr	palm fiber	Malaya
Hyphaene thebaica Mart	Dum	palm fiber	East Africa
Jutilal	*Typha sp*		
Kittool	*Caryota urens L*	palm fiber	Malaya
Leopoldinia piassaba Wallace& Archer	Para piassava	palm leaf-stem fiber	Brazil
Lepironia mucronata Rich	Chinese mat rush	rush stems	China
Livistona chinensis R Br	Chinese fan palm	palm leaf segments	China
Luffa sp	Loofah	net of fruit	Tropics
Mauritia flexusoa L	Moriche palm	palm leaf fiber	Venezuela
Mocoro	*Bactris sp*	palm fiber	South Africa
Monkey bass	*Leopoldinia piassaba* Wallace& Archer	palm leaf-stem fiber	Brazil
Moriche palm	*Mauritia flexuosa L*	palm leaf fiber	Venezuela
Muhlenbergia macoura (H.B.K.) Hitchc	Broom root, rice root	grass root	Mexico
Palmetto	*Sabal sp*	palm fiber	United States
buri	*Corypha utan* Lam	palm fiber	Philippines
Palm fiber Capo negro	*Arenga pinnata* (Wurmb) Merr	palm fiber	Philippines
Nirucge	*Mauritia flexuosa L*	palm leaf fiber	Venezuela
Para piassava	*Leopoldinia piassaba* Wallace& Archer	palm leaf-stem fiber	Brazil
Piassava	*Attalea funifera* Mart, *Leopoldinia piassaba* Wallace & Archer, *Raphia gigantea*, A Chev, *Vonitra sp*	palm fibers	Tropics
Pita de corojo	*Acrocomia sp*	palm leaf fiber	Cuba
Raffia	*Corypha utan*, Lam, *Raphia ruffia* Mart, *Raphia vinifera* P Beauv	palm leaf segments	Madagascar, Philippines
Raphia ruffia Mart	Raffia	palm leaf segments	Madagascar, East Africa
Raphia vinifera P Beauv	West African bass	palm leaf-stem fiber	West Africa
Rice root	*Muhlenbergia macoura* (H.B.K.) Hitchc	roots	Mexico
Rice paper plant	*Tetrapanax papyriferus* (Hook) Koch	pith	Formosa
Sabal sp	Palmetto	palm fiber	Southern United States
Sorghum bicolor (*L*) Moench	Broom corn	flower heads	United States
Southern moss	*Tillandsia usneoides L*	fibrous stem axis	United States
Spanish moss	*Tillandsia usneoides L*	fibrous stem axis	United States
Stipa tenacissima L	Esparto	leaves	Mediterranean

TABLE A2.6 *Continued*

Commercial and Botanical Name[A]		Description	Geographical Sources
Tillandsia usneoides L	Southern moss	fibrous stem axis	United States
Tree beard	*Tillandsia usneoides L*		
Tecum fiber			
Tecum }	*Astrocaryum tucuma* Mart also *Bactris sp*	palm leaf fiber	Brazil
Tetrapanax papyriferus (Hook) Koch	Rice paper plant	pith	Formosa
Typha sp	Cattail leaf fiber and down	rush leaves and flower bristles	Temperate Zones
Vegetable sponge	*Luffa sp*	net of fruist	Japan, West Indies
Vonitra sp	Madagascar piassava or bass	palm leaf-stem fiber	Madagascar
West African bass	*Raphia vinifera* P Beauv	palm leaf-stem fiber	Africa
Zacaton	Mexican rice root	fibrous roots	Mexico
Zostera marina L	Eel grass	leaves	Newfoundland, Nova Scotia

[A] See Footnote[A] of Table A2.4.

Table A2.7
Classification of Major Fibers Used for Textile Purposes

TABLE A2.7 Classification of Major Fibers Used for Textile Purposes

MAN-MADE FIBERS

ORGANIC BASE			INORGANIC BASE
NATURAL POLYMER BASE[A]	SYNTHETIC POLYMER BASE[B,C]		GLASS[D] METAL SILICA
ALGINATE	CONDENSATION POLYMERS		
	NOVOLOID[D]	Cross-linked novolac	
	POLYAMIDES		
	ARAMID[D]	Aromatic nylon	
CELLULOSE	NYLON[D]		
	Nylon 6	Poly(epsilon-caproamide)	
CELLULOSE	Nylon 11	Poly(omega-undecanamide)	
ESTERS	Nylon 6-6	Poly(hexamethylene adipamide)	
Acetate (Secondary	Nylon 6-10	Poly(hexamethylene sebacamide)	
Acetate)	POLYSULFIDE[D]	Poly(phenylene sulfide)	
Triacetate (Primary	POLYESTERS		
Acetate)	Polyester[D]	Polyesters of a dihydric alcohol and terephthalic acid—minimum 85 %	
REGENERATED	POLYBENZIMIDAZOLE[D]	Polymer of tetraaminobiphenyl and diphenyl isophthalate	
CELLULOSE	POLYURETHANES		
RAYON[D]	Spandex[D]	Segmented polyurethane—minimum 85 %	
Cuprammonium	ADDITION POLYMERS		
Saponified Cellulose	POLYHYDROCARBONS		
Acetate	Olefins[D]	Hydrocarbon—minimum 85 %	
Viscose	Unsubstituted	Polyethylene, Polypropylene	
	Aryl-Substituted	Polystyrene	
PROTEIN (AZLON)	ACRYLIC-ESTER SUBSTITUTED POLYHYDROCARBONS		
Casein	Anidex	Minimum of 50 weight % of one or more esters of a monohydric alcohol and acrylic acid	
Zein			
RUBBER	HALOGEN SUBSTITUTED POLYHYDROCARBONS		
	Vinyon[D]	Poly(vinyl chloride)—minimum 85 %	
	Saran[D]	Poly(vinylidene chloride)—minimum 80 %	
	Fluorocarbon	Polytetrafluoroethylene	
	HYDROXYL SUBSTITUTED POLYHYDROCARBONS		
	Vinal[D]	Minimum 50 % vinyl alcohol units; total of vinyl alcohol units and any acetal units—minimum 85 %	
	NITRILE SUBSTITUTED POLYHYDROCARBONS		
	Acrylic[D]	Polyacrylonitrile, or copolymer of acrylonitrile minimum 85 % of acrylonitrile	
	Modacrylic[D]	Polyacrylonitrile, or copolymer of acrylonitrile minimum 35 %, maximum less than 85 % of acrylonitrile	
	Nytril[D]	Minimum of 85 % of a copolymer containing 50 mol %, or more, of poly(vinylidene nitrile)	

NATURAL FIBERS

CELLULOSE BASE[E]	PROTEIN BASE[F]		MINERAL BASE[E]
BAST	STAPLE	FILAMENT	
Flax (Linen)			
Hemp	HAIR	SILK	ASBESTOS
Jute	Alpaca		Chrysotile
Meshta (Kenaf)	Camel		
Ramie	Cashmere		
	Llama		
FRUIT	Mohair		
Coir	Rabbit		
Vicuna			

TABLE A2.7 *Continued*

LEAF	
Abaca (manila)	WOOL[G,H,I]
Cantala	Sheep
Henequen	
Istle	
Maguey	
Sisal	
SEED	
Cotton	
Kapok	

[A]For more complete information, see Table A2.3.
[B]Some of these are polymer blends or copolymers.
[C]All percentages listed are by weight, except as noted.
[D]Generic terms and limiting percentages are taken from" Generic names and definitions of manufactured fibers," *Code of Federal Regulations*, Title 16, Section 303.7, Jan. 1, 1987, pp. 161–163. See Annex A1.
[E]See Tables A2.4, A2.5, and A2.6.
[F]See Table A2.2.
[G]See U. S. Wool Products Labeling Act of 1939.
[H]See ASTM D123 Terminology Relating to Textiles.
[I]See Table A2.1.

A3. TERMS RELATING TO THE HAND OF FABRICS

TABLE A3.1 Terms Relating to the Hand of Fabrics[A]

Physical Property	Explanatory Phrase	Terms to Be Used in Describing Range of Corresponding Component of Hand
Flexibility	ease of bending	pliable (high) to stiff (low).
Compressibility	ease of squeezing	soft (high) to hard (low).
Extensibility	ease of stretching	stretchy (high) to nonstretchy (low).
Resilience	ability to recover from deformation	springy (high) to limp (low). Resilience may be flexural, compressional, extensional, or torsional.
Density	mass per unit volume (based on measurement of thickness[B] and fabric weight)	compact (high) to open (low).
Surface contour	divergence of the surface from planeness	rough (high) to smooth (low).
Surface friction	resistance to slipping offered by the surface	harsh (high) to slippery (low).
Thermal character	apparent difference in temperature of the fabric and the skin of the observer touching it	cool (high) to warm (low).

[A]Methods of test for evaluating properties relating to the hand of fabrics were published as information by Committee D-13 on Textiles, the latest publication being in *1965 Book of ASTM Standards*, Part 24.
[B]Measurements of thickness and weight are made as directed in the procedures described in the ASTM test methods for specific fabrics.

A4. TERMINOLOGY REVISION PROCEDURES

A4.1 *Revisions of Definitions*—When the concept of a term, namely a definition, is already published in Committee D-13 standards, its definition may be revised through one of the following procedures:

A4.1.1 *One Subcommittee Involved*

If the definition appears in only one standard, the definition may be revised in the normal course of revising the standard. If the term is defined in two or more standards of a single subcommittee, a revised definition may be inserted into a new standard, or a revision of an existing standard of that subcommittee, provided the ballot of the proposed standard is accompanied by a cover memorandum or note on the ballot including the following statement:
" Approval of this ballot will constitute approval to substitute the proposed definition for '_____' into the following standards under the jurisdiction of this subcommittee: (Enter here a list of the standard numbers.) and in Terminology D 123."

A4.1.2 *Two or More Subcommittees Involved*

If the term in question is defined in the standards of two or more subcommittees, a definition may be revised as follows: The technical subcommittee shall submit the proposed new or revised definition to the chairman of the terminology subcommittee who will compare it with existing definitions to determine whether it is an improvement (broader in scope, less wordy, more precise, etc.) over the existing definition(s). If it is not an improvement, the chairman of the terminology subcommittee may recommend to the technical subcommittee that it use the existing definition, but add its own point-of-view in a Discussion following the definition. If the new definition appears to be an improvement, the chairman of the terminology subcommittee shall: (1) recommend the revised definition to the other technical subcommittees involved, (2) request permission of those subcommittee chairmen to conduct a ballot of the subcommittees involved, (3) if permission is granted, send

a simultaneous ballot to those subcommittees and to the terminology subcommittee*, such ballot to contain the statement given in quotations below, (4) resolve all negative votes and comments through joint subcommittee actions, (5) once a single definition has been agreed upon by the subcommittees, submit the definition to Main Committee ballot as a revision to Terminology D 123, and (6) once the definition is accepted at Society level, ensure that it replaces existing definitions in all D-13 standards which contain it.

"Approval of this ballot will constitute approval to substitute the proposed definition for '____' into the following standards under the jurisdiction of these subcommittees: (Enter here a list of the subcommittees and standard numbers.) and into Terminology D 123."

*The ballot will (1) be mailed without duplicates to any person that is a member of more than one of the subcommittees involved and (2) will be returned to ASTM Central Balloting. ASTM staff will keep a record of the total number of ballots mailed for calculating percent return.

A4.1.3 The chairman of the terminology subcommittee may also (1) initiate improvements in definitions, (2) initiate ballots to resolve redundancies, and (3) resolve redundancies through editorial changes by coordinating such changes with the chairmen of the technical subcommittee(s) involved, the ASTM staff Committee Editor, and the ASTM Editorial Review Committee.*

*Editorial changes to eliminate redundant definitions will not result in a year change to the standard whereas substantive changes will result in a year change.

A5. INDUSTRY ACCEPTED SYNONYMS

A5.1 Industry accepted synonyms will be included in D123 following a term with a definition. An industry accepted synonym is listed and enclosed by parentheses.

A5.1.1 This industry accepted synonym will be listed in Terminology D 123 with a cross reference notation which refers directly to the defined term. (See Examples 1 and 2)

A5.1.2 Synonyms do not show a jurisdiction notation or a list of standards in which it may appear. (See Examples 1 and 2)

A5.1.3 Synonyms are not listed in Section 4, the Ready Reference, in which the jurisdiction is noted. If the synonym has been defined, it will appear in Section 4, Ready reference. (See Example 3)

A5.1.4 Synonyms are under the jurisdiction of the subcommittee which determines they synonymity to a specific term

A5.1.5 The following examples illustrate how synonyms will be included:

Example 1

back width, n *in body measurements,* the distance from back-breakpoint to back- breakpoint. (Syn.*cross back width*) [D13.55] D5219

cross back width — **See** back width

Example 2

bail, n *in zippers,* a portion or portions of the slider to which the pull or pulls are attached (Syn.*lug*) [D13.54] D2050

lug — **See** bail

Example 3

bunch, n a defect in yarn characterized by a segment not over 6 mm (1/4 in) in length that shows an abrupt increase in diameter caused by more fibers matted in this particular place.(Syn.*slub, slug**) [D13.58] D2255

slug cannot be used as a synonym because it is under the jurisdiction of a different subcommittee — D13.59 (See Example 4)

slub, n — an abruptly thickened place in a yarn (Syn.***lump, piecing*, slough-off*, slug***) [D13.58] D2255, *D3990

lump — **See** back width

piecing, *slough-off, and ***slug***cannot be used a synonyms for slub, because the jurisdiction of these terms is controlled by another subcommittee (See Example 4)

Example 4

slug,n—*in raw silk,* a thickened place several times the diameter of the yarn, 3 mm (1/8 in) or over in length (Syn.*piecing, slough-off*) [D13.59] D3990

piecing,n— a thick place in a spun yarn caused by poor splicing. [D13.59] D3990

slough-off, n— *in woven fabrics,*a defect caused by several coils of yarn slipping off the filling bobbin simultaneously and being woven into the fabric in a group.[[D13.59] D3990

APPENDIX

(Nonmandatory Information)

X1. OTHER SOURCES OF TEXTILE TERMINOLOGY

X1.1 *Non-consensus Recognized Terminologies*

Stanley Backer and Emery I. Valko, "Thesaurus of Textile Terms," MIT Press, Cambridge, 1966.

W. L. Carmichael, George E. Linton, Isaac Price," Calloway Textile Dictionary," Calloway Mills, 1947.

"Glossary of Textile Terms," Textile Yarn Association of America ca. 1974.

Dictionary of Fiber's Textile Terminology, Hoechst-Celanese Corporation, 1990.

George E. Linton, "The Modern Apparel and Textile Dictionary," Textile Book Service, Plainfield, NJ, 1973.

Lloyd R. Whittington, "Whittington's Dictionary of Plastics," Technomic Publishing Co., Stamford, CT, 1968.

Phyllis G. Tortora and Robert S. Merkel, " Fairchild's Dictionary of Textiles," Fairchild Publishing Co., New York, 1996.

X1.2 *Consensus Standards*

"Textile Terms and Definitions," Ninth Edition, Textile Institute, Manchester, 1991.

X1.3 *US Govt. Standards and Publications*

"Glossary of Knitting Imperfections," Military Standard 1491, Department of Defense, Washington, DC, 1971.

"Code of Federal Regulations," Title 16 U.S. Government Printing Office, Washington, DC 1977.