



# Standard Specification for Mineral Filler For Bituminous Paving Mixtures<sup>1</sup>

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*This standard has been approved for use by agencies of the Department of Defense.*

<sup>ε1</sup> NOTE—Paragraph 1.3 was added editorially (BOCA caveat) February 2001.

## 1. Scope

1.1 This specification covers mineral filler added as a separate ingredient for use in bituminous paving mixtures.

1.2 The values stated in SI units are to be regarded as the standard. Inch-pound units, shown in parentheses, are for information only.

1.3 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

## 2. Referenced Documents

### 2.1 ASTM Standards:

- C 50 Practice for Sampling, Inspection, Packing, and Marking of Lime and Limestone Products<sup>2</sup>
- C 183 Practice for Sampling and the Amount of Testing of Hydraulic Cement<sup>2</sup>
- C 311 Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete<sup>3</sup>
- D 546 Test Method for Sieve Analysis of Mineral Filler for Road and Paving Materials<sup>4</sup>
- D 4318 Test Method for Liquid Limit, Plastic Limit, and

## Plasticity Index of Soils<sup>5</sup>

## 3. General Description

3.1 Mineral filler shall consist of finely divided mineral matter such as rock dust, slag dust, hydrated lime, hydraulic cement, fly ash, loess, or other suitable mineral matter. At the time of use, it shall be sufficiently dry to flow freely and essentially free from agglomerations.

## 4. Physical Requirements

4.1 Mineral filler shall be graded within the following limits:

| Sieve           | Percent Passing (by Mass) |
|-----------------|---------------------------|
| 600-µm (No. 30) | 100                       |
| 300-µm (No. 50) | 95 to 100                 |
| 75-µm (No. 200) | 70 to 100                 |

4.2 Mineral Filler prepared from rock dust, slag dust, loess, and similar materials shall be essentially free from organic impurities and have a plasticity index not greater than 4.

NOTE 1—Plasticity index limits are not appropriate for hydraulic lime and cement.

## 5. Methods of Sampling and Testing

5.1 Sample the mineral filler according to Practice C 50, C 183, or Test Methods C 311, whichever is most appropriate for the material being sampled, except as noted in 5.1.1.

5.1.1 Obtain samples at random intervals not to exceed each 300 tons of material as delivered.

5.2 The minimum size of field samples shall be 5.0 kg. Reduce the field sample to a minimum size of 2.5 kg for testing.

5.3 Determine the grading of the material by Test Method D 546.

5.4 Determine the plasticity index by Test Method D 4318.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.50 on Aggregate Specifications.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 04.01.

<sup>3</sup> Annual Book of ASTM Standards, Vol 04.02.

<sup>4</sup> Annual Book of ASTM Standards, Vol 04.03.

<sup>5</sup> Annual Book of ASTM Standards, Vol 04.08.

 **D 242**

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