



Standard Terminology Relating to Materials for Roads and Pavements¹

This standard is issued under the fixed designation D 8; 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.

1. Scope

1.1 This standard is a compilation of terminology related to materials used in the highway industry, generally for the construction of bituminous pavements, and that are within the jurisdiction of Committee D04. Terms that are generally understood or that are adequately defined in other readily available sources are not included.

1.2 Other terminology under the jurisdiction of Committee D04 is included in two other standards. Terms relating to bridge deck and substructure protection are defined in Terminology D 3743. Terms relating to sealants for joints and cracks are defined in Terminology D 5535.

1.3 When a term is used in an ASTM document for which Committee D04 is responsible, it is included herein only when judged, after review by Subcommittee D04.95, to be a term generally usable in a number of Committee D04 standards.

1.4 Definitions that are identical to those published by other ASTM committees or other standards organizations are identified with the ASTM designation (for example, Terminology C 125) or with the abbreviation of the name of the organization.

1.5 A definition in this standard is a statement of the meaning of a word or word group expressed in a single sentence with additional information included in notes or discussion.

NOTE 1—The subcommittee responsible for this standard will review definitions on a five-year basis to determine if the definition is still appropriate as stated. Revisions will be made when determined necessary.

2. Referenced Documents

2.1 ASTM Standards:

C 125 Terminology Relating to Concrete and Concrete Aggregates²

D 3743 Terminology Relating to Bridge Deck and Substructure Protection³

D 5535 Terminology Relating to Formed-in-Place Sealants for Joints and Cracks in Pavements³

¹ This terminology is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.95 on Quality Control, Inspection and Testing Agencies.

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² *Annual Book of ASTM Standards*, Vol 04.02

³ *Annual Book of ASTM Standards*, Vol 04.03.

2.2 AASHTO Standards:

MP2 Standard Specification for Superpave Volumetric Mix Design⁴

3. Terminology

3.1 Definitions:

3.1.1 Bituminous Materials:

anionic emulsion, *n*—a type of emulsion such that a particular emulsifying agent establishes a predominance of negative charges on the discontinuous phase.

asphalt, *n*—a dark brown to black cementitious material in which the predominating constituents are bitumens which occur in nature or are obtained in petroleum processing.

asphalt cement, *n*—a fluxed or unfluxed asphalt specially prepared as to quality and consistency for direct use in the manufacture of bituminous pavements, and having a penetration at 25°C (77°F) of between 5 and 300, under a load of 100 g applied for 5 s.

asphaltenes, *n*—the high molecular weight hydrocarbon fraction precipitated from asphalt by a designated paraffinic naphtha solvent at a specified solvent-asphalt ratio.

DISCUSSION—The asphaltene fraction should be identified by the solvent and solvent-asphalt ratio used.

asphalt rock (rock asphalt), *n*—a naturally occurring rock formation, usually limestone or sandstone, impregnated throughout its mass with a minor amount of bitumen.

asphalt-rubber, *n*—a blend of asphalt cement, reclaimed tire rubber, and certain additives in which the rubber component is at least 15 % by weight of the total blend and has reacted in the hot asphalt cement sufficiently to cause swelling of the rubber particles.

bitumen, *n*—a class of black or dark-colored (solid, semisolid, or viscous) cementitious substances, natural or manufactured, composed principally of high molecular weight hydrocarbons, of which asphalts, tars, pitches, and asphaltites are typical.

bituminous, *adj*—containing or treated with bitumen (also *bituminized*); for example: bituminous concrete, bituminized felts and fabrics, bituminous pavement.

bituminous emulsion, *n*—(1) a suspension of minute globules

⁴ Available from American Association of State Highway and Transportation Officials (AASHTO), 444 N. Capitol St., NW, Suite 249, Washington, DC 20001.