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Standard Terminology Relating to Materials for Roads and Pavements¹

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BITUMINOUS MATERIALS

Relating in General to 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.

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*). Examples: bituminous concrete, bituminized felts and fabrics, bituminous pavement.

bituminous emulsion, *n*—(1) a suspension of minute globules of bituminous material in water or in an aqueous solution, (2) a suspension of minute globules of water or of an aqueous solution in a liquid bituminous material.

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

cut-back asphalt, *n*—petroleum residuum (asphalt) which has been blended with petroleum distillates.

DISCUSSION—Slow-curing materials may be made directly by distillation and are often referred to as road oils.

cut-back products, *n*—petroleum or tar residuums which have been blended with distillates.

flux, *n*—a bituminous material, generally liquid, used for softening other bituminous materials.

Relating Specifically to Petroleum or Asphalts

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 frac-

tion 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.

naphthene-aromatics, *n*—a mixture of naphthenic and aromatic hydrocarbons which are adsorbed from a paraffinic solvent on an adsorbent during percolation and then desorbed with an aromatic solvent such as toluene.

DISCUSSION—The naphthene-aromatics fraction should be identified by the solvent, the solvent-asphalt ratio and the absorbing medium.

native asphalt, *n*—asphalt occurring as such in nature.

polar-aromatics, *n*—a polar aromatic hydrocarbon fraction that is adsorbed on an adsorbing medium from a paraffinic solvent during percolation and then desorbed with a chlorinated hydrocarbon solvent such as trichloroethylene.

DISCUSSION—The polar-aromatics fraction should be identified by the solvent, the solvent-asphalt ratio and the absorbing medium.

reclaimed asphalt pavement (RAP), *n*—asphalt pavement or paving mixture removed from its original location for use in recycled asphalt paving mixture.

recycled asphalt paving mixture, *n*—a mixture of reclaimed asphalt pavement with the inclusion, if required, of asphalt cement, emulsified asphalt, cut-back asphalt, recycling agent, mineral aggregate, and mineral filler.

recycling agent (RA), *n*—a blend of hydrocarbons with or without minor amounts of other materials that is used to alter or improve the properties of the aged asphalt in a recycled asphalt paving mixture.

rock asphalt—see **asphalt rock**.

saturates, *n*—a mixture of paraffinic and naphthenic hydrocarbons that on percolation in a paraffinic solvent are not adsorbed on the adsorbing medium. Other compounds such as naphthenic and polar aromatics are adsorbed thus permitting the separation of the saturate fraction.

DISCUSSION—The saturates fraction should be identified by the

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