
Standard Specification for Performance-Graded Hot-Poured Asphalt Crack Sealant

AASHTO Designation: MP 25-18 (2019)¹

**Technical Subcommittee: 4e, Joints, Bearings,
and Geosynthetics**

Release: Group 2 (June)



**American Association of State Highway and Transportation Officials
555 12th Street NW, Suite 1000
Washington, DC 20004**

Performance-Graded Hot-Poured Asphalt Crack Sealant

AASHTO Designation: MP 25-18 (2019)¹



Technical Subcommittee: 4e, Joints, Bearings,
and Geosynthetics

Release: Group 2 (June)

1. SCOPE

- 1.1. This specification covers hot-poured asphalt crack sealant graded by performance. Upon grading for performance, the hot-poured asphalt crack sealant will be assigned a sealant grade (SG) designation (e.g., SG 52-16). Grading designations are related to the average 7-day maximum pavement design temperature and the minimum pavement design temperature shown in Table 1.

2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
- M 323, Superpave Volumetric Mix Design
 - R 35, Superpave Volumetric Design for Asphalt Mixtures
 - R 66, Sampling Asphalt Materials
 - T 366, Apparent Viscosity of Hot-Poured Asphalt Crack Sealant Using Rotational Viscometer
 - T 367, Accelerated Aging of Hot-Poured Asphalt Crack Sealant Using a Vacuum Oven
 - T 368, Measuring Low-Temperature Flexural Creep Stiffness of Hot-Poured Asphalt Crack Sealant by Bending Beam Rheometer (BBR)
 - T 369, Evaluation of the Low-Temperature Tensile Property of Hot-Poured Asphalt Crack Sealant by Direct Tension Test
 - T 370, Measuring Adhesion of Hot-Poured Asphalt Crack Sealant Using Direct Adhesion Tester
 - T 371, Measuring Interfacial Fracture Energy of Hot-Poured Asphalt Crack Sealant Using a Blister Test
 - TP 126, Evaluation of the Tracking Resistance of Hot-Poured Asphalt Crack Sealant by Dynamic Shear Rheometer (DSR)
- 2.2. *ASTM Standard:*
- D5167, Standard Practice for Melting of Hot-Applied Joint and Crack Sealant and Filler for Evaluation

3. TERMINOLOGY

3.1. *Definition:*

- 3.1.1. *hot-poured asphalt crack sealant*—polymer or rubber modified asphalt material most often formulated with mineral filler, used in pavement cracks and joints.

Note 1—Based on the references, hot-poured asphalt crack sealant is typically applied at a temperature of 160°C or above.

4. ORDERING INFORMATION

- 4.1. When ordering under this specification, include in the purchase order the sealant grade (SG) designation of the hot-poured asphalt crack sealant required (e.g., (1) MP 25, SG 52-16, or (2) MP 25, SG 64-34).

5. MATERIALS AND MANUFACTURE

- 5.1. Asphalt binder of the hot-poured asphalt crack sealant shall be prepared by the refining of crude petroleum by suitable methods, with or without the addition of modifiers.
- 5.2. Modifiers may be any organic material of suitable manufacture that is used in virgin or recycled condition and that is dissolved, dispersed, or reacted in asphalt binder to enhance its performance.
- 5.3. The asphalt binder shall be homogeneous, free from water and deleterious materials, and shall not foam when heated to 175°C.
- 5.4. The grade of hot-poured asphalt crack sealant shall conform to the requirements given in Table 1.