



Standard Test Methods for Sealants and Fillers, Hot-Applied, for Joints and Cracks in Asphaltic and Portland Cement Concrete Pavements¹

This standard is issued under the fixed designation D 5329; 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 These test methods cover tests for hot-applied types of joint and crack sealants and fillers for portland cement concrete and asphaltic concrete pavements. There are numerous standard material specifications that use these test methods. Refer to the respective standard material specification of interest to determine which of the following test methods to use. For sample melting and concrete block preparation see their respective standard practices.

1.2 The test methods appear in the following sections:

	Section
Artificial Weathering	15
Asphalt Compatibility	14
Bond, Non-Immersed	9
Bond, Fuel-Immersed	11
Bond, Water-Immersed	10
Cone Penetration, Non-Immersed	6
Cone Penetration, Fuel-Immersed	7
Flexibility	18
Flow	8
Resilience	12
Resilience, Oven-Aged	13
Solubility	17
Tensile Adhesion	16

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are provided for information purposes only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

C 1442 Practice for Conducting Tests on Sealants Using

Artificial Weathering Apparatus

D 5 Test Method for Penetration of Bituminous Materials

D 217 Test Methods for Cone Penetration of Lubricating Grease

D 471 Test Method for Rubber Property-Effect of Liquids

D 1074 Test Method for Compressive Strength of Bituminous Mixtures

D 1561 Practice for Preparation of Bituminous Mixture Test Specimens by Means of California Kneading Compactor

D 1985 Practice for Preparing Concrete Blocks for Testing Sealants, for Joints and Cracks

D 3381 Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction

D 5167 Practice for Melting of Hot-Applied Joint and Crack Sealant and Filler for Evaluation

D 6690 Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

E 145 Specification for Gravity-Convection and Forced-Ventilation Ovens

E 171 Specification for Standard Atmospheres for Conditioning and Testing Flexible Barrier Materials

G 23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Material³

G 151 Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources

G 153 Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

G 154 Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials

G 155 Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

3. Significance and Use

3.1 These test methods describe procedures for determining specification conformance for hot-applied, field-molded joint and crack sealants and fillers.

4. Sample Melting

4.1 See Practice D 5167.

³ Withdrawn.

¹ These test methods are under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and are the direct responsibility of Subcommittee D04.33 on Formed-In-Place Sealants for Joints and Cracks in Pavements.

Current edition approved Feb. 1, 2004. Published February 2004. Originally approved in 1992. Last previous edition approved in 1996 as D 5329-96.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.