



Designation: D8367 – 21

Standard Practice for Making a Laboratory Pavement Marking Sample Using a Pavement Marking and Drop-on Particles¹

This standard is issued under the fixed designation D8367; 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 practice covers a procedure and apparatus for producing a representative laboratory pavement marking sample by applying a pavement marking material onto a suitable substrate, followed immediately with an application of drop-on particles consisting of retroreflective optics or other functional particles such as skid resistance particles suitable for laboratory testing or display. Examples of pavement marking materials appropriate for this practice would include water-borne traffic paint, solvent borne traffic paint, and plural component pavement markings such as epoxy, modified epoxy, polyurea, methyl methacrylate, and thermoplastic pavement markings. Plural component materials with extremely fast gel times might not be appropriate for this practice because the material gels too quickly to allow proper embedment of the drop-on particles.

1.2 The finished sample will consist of a pavement marking material applied in a liquid state to a sample substrate at the prescribed film thickness, with drop-on particles applied at the prescribed drop rate and embedment level on the surface of the pavement marking material, and then properly cured. The drop-on particles may consist of retroreflective optics such as glass beads or composite optics, or non-retroreflective particles such as skid resistant particles, or several of these items in combination.

1.3 The values stated in inch-pound units are to be regarded as the standard except where noted in the practice. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

- D823 Practices for Producing Films of Uniform Thickness of Paint, Coatings and Related Products on Test Panels
- D2205 Guide for Selection of Tests for Traffic Paints
- D4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
- D4414 Practice for Measurement of Wet Film Thickness by Notch Gages
- D6628 Specification for Color of Pavement Marking Materials
- D7307 Practice for Sampling of Thermoplastic Pavement Marking Materials
- D7308 Practice for Sample Preparation of Thermoplastic Pavement Marking Materials
- D8008 Practice for Representative Field Sampling of Traffic Paints
- E303 Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
- E1349 Test Method for Reflectance Factor and Color by Spectrophotometry Using Bidirectional (45°:0° or 0°:45°) Geometry
- E1710 Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
- E2177 Test Method for Measuring the Coefficient of Retroreflected Luminance (R_L) of Pavement Markings using the Bucket Method in a Condition of Wet Recovery
- E2302 Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer

¹ This practice is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.44 on Traffic Coatings.

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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.