



Standard Guide for Testing Coil Coatings¹

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This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This guide covers procedures for testing coil coatings. The test methods included are listed in Table 1. Where more than one test method is listed for the same characteristic, no attempt is made to indicate superiority of one method over another. Selection of test methods to be followed must be governed by the requirements in each individual case, together with agreement between the producer and user.

1.2 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

1.3 *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. Some specific hazards statements are given in Section 7 on Hazards.*

2. Referenced Documents

2.1 ASTM Standards:²

- B117** Practice for Operating Salt Spray (Fog) Apparatus
- B368** Test Method for Copper-Accelerated Acetic Acid-Salt Spray (Fog) Testing (CASS Test)
- C1371** Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emis-someters
- C1549** Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflec-tometer
- D522** Test Methods for Mandrel Bend Test of Attached Organic Coatings
- D523** Test Method for Specular Gloss

- D610** Practice for Evaluating Degree of Rusting on Painted Steel Surfaces
- D660** Test Method for Evaluating Degree of Checking of Exterior Paints
- D661** Test Method for Evaluating Degree of Cracking of Exterior Paints
- D714** Test Method for Evaluating Degree of Blistering of Paints
- D822** Practice for Filtered Open-Flame Carbon-Arc Expos-ures of Paint and Related Coatings
- D823** Practices for Producing Films of Uniform Thickness of Paint, Varnish, and Related Products on Test Panels
- D870** Practice for Testing Water Resistance of Coatings Using Water Immersion
- D968** Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
- D1005** Test Method for Measurement of Dry-Film Thick-ness of Organic Coatings Using Micrometers
- D1014** Practice for Conducting Exterior Exposure Tests of Paints and Coatings on Metal Substrates
- D1193** Specification for Reagent Water
- D1200** Test Method for Viscosity by Ford Viscosity Cup
- D1210** Test Method for Fineness of Dispersion of Pigment-Vehicle Systems by Hegman-Type Gage
- D1212** Test Methods for Measurement of Wet Film Thick-ness of Organic Coatings
- D1308** Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- D1474** Test Methods for Indentation Hardness of Organic Coatings
- D1475** Test Method For Density of Liquid Coatings, Inks, and Related Products
- D1654** Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- D1729** Practice for Visual Appraisal of Colors and Color Differences of Diffusely-Illuminated Opaque Materials
- D1735** Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus
- D1823** Test Method for Apparent Viscosity of Plastisols and Organosols at High Shear Rates by Extrusion Viscometer
- D1824** Test Method for Apparent Viscosity of Plastisols and Organosols at Low Shear Rates

¹ This guide is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.53 on Coil Coated Metal.

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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.