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.

Designation: D6577 – 15 (Reapproved 2019)

Standard Guide for Testing Industrial Protective Coatings[1]

This standard is issued under the fixed designation D6577; 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 guide covers the selection and use of test methods and procedures for testing industrial protective coatings. Selection of the standards to be followed must be governed by experience and the requirements in each individual case, together with agreement between the supplier and the user.

1.2 This guide covers the testing of liquid coatings as applied on substrate by brushing, rolling, spraying, or other means appropriate to the coating and circumstance.

NOTE 1—The term "industrial protective coating" as used in this guide is described in the scope of Subcommittee D01.46[1] as "paints applied to substrates on-site of structures and buildings, especially where subject to corrosive environments, as industrial, urban, and marine environments."

NOTE 2—Guides for testing other coating types, such as Guides D4712, D5146, D5324 or for surface preparation, coating application, such as Guide D3276, are available and should be used when it is applicable.

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

1.4 *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]

B117 Practice for Operating Salt Spray (Fog) Apparatus
C868 Test Method for Chemical Resistance of Protective Linings (Withdrawn 2015)[3]
D16 Terminology for Paint, Related Coatings, Materials, and Applications
D56 Test Method for Flash Point by Tag Closed Cup Tester
D93 Test Methods for Flash Point by Pensky-Martens Closed Cup Tester
D185 Test Methods for Coarse Particles in Pigments
D344 Test Method for Relative Hiding Power of Paints by the Visual Evaluation of Brushouts (Withdrawn 2018)[3]
D522 Test Methods for Mandrel Bend Test of Attached Organic Coatings
D523 Test Method for Specular Gloss
D562 Test Method for Consistency of Paints Measuring Krebs Unit (KU) Viscosity Using a Stormer-Type Viscometer
D609 Practice for Preparation of Cold-Rolled Steel Panels for Testing Paint, Varnish, Conversion Coatings, and Related Coating Products
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
D662 Test Method for Evaluating Degree of Erosion of Exterior Paints
D714 Test Method for Evaluating Degree of Blistering of Paints
D772 Test Method for Evaluating Degree of Flaking (Scaling) of Exterior Paints
D822 Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings
D823 Practices for Producing Films of Uniform Thickness of Paint, Coatings and Related Products on Test Panels
D869 Test Method for Evaluating Degree of Settling of Paint
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 Thickness of Organic Coatings Using Micrometers
D1014 Practice for Conducting Exterior Exposure Tests of Paints and Coatings on Metal Substrates
D1200 Test Method for Viscosity by Ford Viscosity Cup

[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 D01.46 on Industrial Protective 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.

[3] The last approved version of this historical standard is referenced on www.astm.org.

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