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Standard Practice for Detergent Resistance of Organic Finishes¹

This standard is issued under the fixed designation D2248; 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.

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

1. Scope

1.1 This practice covers the determination of the resistance to failure, in an accelerated manner, of organic finishes when immersed in a detergent solution.

1.2 The values stated in SI units are to be regarded as the standard. The values 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.*

2. Referenced Documents

2.1 ASTM Standards:²

D523 Test Method for Specular Gloss

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

D714 Test Method for Evaluating Degree of Blistering of Paints

D823 Practices for Producing Films of Uniform Thickness of Paint, Varnish, and Related Products on Test Panels

D1005 Test Method for Measurement of Dry-Film Thickness of Organic Coatings Using Micrometers

D1186 Test Methods for Nondestructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to a Ferrous Base (Withdrawn 2006)³

D1193 Specification for Reagent Water

D1400 Test Method for Nondestructive Measurement of Dry Film Thickness of Nonconductive Coatings Applied to a Nonferrous Metal Base (Withdrawn 2006)³

D1474 Test Methods for Indentation Hardness of Organic Coatings

D1654 Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments

D1730 Practices for Preparation of Aluminum and Aluminum-Alloy Surfaces for Painting

D2092 Guide for Preparation of Zinc-Coated (Galvanized) Steel Surfaces for Painting (Withdrawn 2008)³

D2197 Test Method for Adhesion of Organic Coatings by Scrape Adhesion

D2244 Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

D3359 Test Methods for Measuring Adhesion by Tape Test

3. Significance and Use

3.1 Any effects such as color change, blistering, loss of adhesion, softening, or embrittlement are observed and noted.

4. Apparatus

4.1 *Container*—A corrosion-resistant container equipped with the means to control the solution temperature within the range specified and to control the liquid level at ± 5 mm ($3/16$ in.). Agitation may be required to maintain temperature uniformity.

4.2 *Cover*—The container shall be provided with a cover to retard evaporation and to contain the test specimens completely.

5. Test Specimens

5.1 Unless otherwise specified, the test specimens shall be 100 by 300 by 0.9 mm (4 by 12 in. by 20 gage) in size. The test specimen composition, surface preparation, and number of test specimens shall be agreed upon by the purchaser and the seller.

NOTE 1—Applicable test panel description and surface preparation methods are as follows: Practices D609, D1730 and D2092.

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 D01.27 on Accelerated Testing.

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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.