~~Designation:D2048–92 (Reapproved 2008)~~ Designation: D2048 – 10

Standard Test Method for Powdering of Floor Polish Films[1]

This standard is issued under the fixed designation D2048; 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 test method covers a bench procedure for the determination of the degree of powdering of floor polishes under ambient conditions as well as conditions of low relative humidity.

~~1.2~~

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

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]

D3153 Test Method for Recoatability of Water-Emulsion Floor Polishes

3. Terminology

3.1 *Definition:*

3.1.1 *powdering*—partial or total disintegration of the polish film resulting in a fine, light colored material.

4. Significance and Use

4.1 This is a comparative test method. If this method does not indicate powdering, it is still possible that the product in actual use may powder.

5. Apparatus

5.1 *Textile Crockmeter,*[3] weighted with a 2.2-lb (1-kg) weight. The weight is placed directly over the abrasion dowel and attached with two-faced tape.

5.2 *Abrading Felt*—670 Kelly No. 720 billiard cloth cut into ~~50~~2 by ~~50-mm (2~~2-in. (50 by ~~2-in.)~~50-mm) squares.

5.3 *Substrate*—Official Vinyl Composition Tile (OVCT)[4] shall be used in this test.

5.4 *Volumetric Pipet~~, 2-mL.~~* , 0.07-oz (2-mL).

5.5 *Cheesecloth Applicator*, washed to remove sizing; cut into ~~50-mm (2-in.)~~2-in. (50-mm) strips of four-ply cloth; folded twice.

5.6 *Relative Humidity and Temperature Indicator*.

5.7 *Glove Box*—An enclosure that houses the crockmeter keeping it in a constant humidity and temperature environment; features rubber glove inserts so that the tests may be run keeping the environment of the crockmeter constant.

5.8 *Desiccant*—Silica gel or calcium chloride.

5.9 *Salts for Constant Humidity Conditions*—$LiCl{\cdot}H_2O$, $CaCl_2{\cdot}6H_2O$, or $Mg(NO_3)_2{\cdot}6H_2O$.

NOTE 1—Saturated aqueous solutions of the following salts in contact with an excess of a definite solid phase of salt at the indicated temperatures and in an enclosed space will maintain the required constant humidities:

$LiCl{\cdot}H_2O$ at ~~25°C (77°F)~~77°F (25°C) yields 11.1 % relative humidity.

$CaCl_2{\cdot}6H_2O$ at ~~10°C (50°F)~~50°F (10°C) yields 38.0 % relative humidity.

---

[1] This test method is under the jurisdiction of ASTM Committee D21 on Polishes and is the responsibility of Subcommittee D21.04 on Performance Tests.

Current edition approved ~~March~~May 1, ~~2008.~~2010. Published ~~April 2008.~~June 2010. Originally approved in 1964. Last previous edition approved in ~~2002~~2008 as D2048 – 92(2002~~8~~). DOI: ~~10.1520/D2048-92R08.~~10.1520/D2048-10.

[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 sole source of supply of the apparatus known to the committee at this time is Atlas Electric Devices Co., Chicago, IL. If you are aware of alternative suppliers, please provide this information to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend.

[4] OVCT is Official Vinyl Composition Tile of the Chemical Specialties Manufacturers Association, Inc., 1913 Eye St., N.W., Washington, DC 20006.