



## Tentative Test Method for POWDER RESISTANCE OF FLOOR POLISH FILMS<sup>1</sup>

This Tentative Method has been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia, Pa. 19103.

*This test method is actually a revision of D 2048-69, but was erroneously given a new title and number designation. The method is currently in the ballot process in order to correct this error.*

### 1. Scope

1.1 This 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.

### 2. Significance

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

### 3. Definition

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

### 4. Apparatus

4.1 *Textile Crockmeter*, weighted with a 1-kg weight. The weight is placed directly over the abrasion dowel and attached with two-faced tape.<sup>2</sup>

4.2 *Abrading Felt*—670 Kelly No. 720 billiard cloth cut into 50 by 50-mm (2 by 2-in.) squares.<sup>3</sup>

4.3 *Substrate*—Official Test Vinyl Asbestos Tile (OTVAT), Black, 228 by 228-mm (9 by 9-in) tile.<sup>4</sup>

4.4 *Volumetric Pipet*, 2-ml.

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

4.6 *Relative Humidity and Temperature Indicator*.

4.7 *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.

4.8 *Desiccant*—Silica gel or calcium chloride.

4.9 *Salts for Constant Humidity Conditions*—LiCl·H<sub>2</sub>O, CaCl<sub>2</sub>·6H<sub>2</sub>O, or Mg(NO<sub>3</sub>)<sub>2</sub>·6H<sub>2</sub>O.

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·H<sub>2</sub>O at 25°C (77°F) yields 11.1 % relative humidity.

CaCl<sub>2</sub>·6H<sub>2</sub>O at 10°C (50°F) yields 38.0 % relative humidity.

Mg(NO<sub>3</sub>)<sub>2</sub>·6H<sub>2</sub>O at 23.9°C (75°F) yields 42.9 % relative humidity.

4.10 *Fan*, small, electric.

4.11 *Metal Clip*, to hold the abrading felt on the crockmeter surface during testing.

### 5. Preparation of Test Sample

5.1 Clean the tile surface in such a fashion as to ensure removal of any coating present.

5.2 Pipet 2 ml of finish onto the center of the test panel. Place the cheesecloth into the polish and allow it to absorb the emulsion. Distribute the emulsion evenly over the surface; then draw the cheesecloth downward in smooth separate

<sup>1</sup> This method is under the jurisdiction of ASTM Committee D-21 on Polishes.

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<sup>2</sup> Textile Crockmeter available from Atlas Electric Devices Co., Chicago, Ill. Model CM-5 (motorized) is preferred for consistency of results.

<sup>3</sup> Abrading felt available from Edward H. Best & Co., Boston, Mass. or Atlas Electric Devices Co., Chicago, Ill.

<sup>4</sup> OTVAT is Official Test Vinyl Asbestos Tile of the Chemical Specialties Manufacturers Association, Inc., 1001 Connecticut Ave., N.W., Washington, D. C. 20036.