Designation: F 925 – 02

Standard Test Method for Resistance to Chemicals of Resilient Flooring[1]

This standard is issued under the fixed designation F 925; 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 test method provides a procedure for determining the resistance of resilient floor covering to surface deterioration when exposed to various chemical reagents. This test method is not intended as a staining test nor as a method to judge surface and appearance restoration of the sample after exposure to the chemical reagent.

1.2 The values stated in inch-pound units are to be regarded as the 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.* Specific hazard information is provided in Section 5 of this test method.

2. Referenced Documents

2.1 *ASTM Standards:*

D 2244 Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates[2]

F 142 Test Method for Indentation of Resilient Floor Tiles (McBurney Test)[3]

F 386 Test Method for Measuring Thickness of Resilient Flooring Materials Having Flat Surfaces[3]

F 1914 Test Method for Short-Term Indentation and Residual Indentation of Resilient Floor Covering[3]

3. Significance and Use

3.1 Resilient flooring products are designed and formulated to have good resistance to most common chemicals encountered in typical use. High performance wear layers can also be used to enhance cleanability and chemical resistance. Resilient flooring used in residential and commercial environments may be subjected to a variety of chemicals through accidental spillage or as ingredients used for hygienic purposes. Performance is dependent upon the flooring formulation and that of the maintenance products used on the flooring. This test method provides a means of estimating the relative susceptibility of resilient floor covering to change when exposed to chemical reagents.

4. Apparatus

4.1 *Gloves*, impervious vinyl or rubber,

4.2 *Tweezers*, or forceps,

4.3 *Medicine Dropper*, 3 in. straight glass with rubber bulb or pipette having a point opening diameter not less than 1⁄16 in. (1.6 mm) or greater than 5⁄64 in. (1.8 mm),

4.4 *White Facial Tissue*.

4.5 *Watch Glass*.

4.6 *Timer*.

4.7 *Filter Paper*.

4.8 *Small Laboratory Spatula*, approximately ¼ –½ in.-wide blade, rounded bottom, not sharpened,

4.9 *Suitable Spectrophotometer or Colorimeter*, with a minimum ¼ in. (6.35 mm) diameter opening having a cool white fluorescent (CWF) or daylight (D-65) light source, or both, that measures color in CIE L*, a*, b* using CIE 10° standard observer and specular included (see Test Method D 2244).

4.10 *Indentation Tester*, see Test Methods F 142 and F 1914.

4.11 *Thickness Tester*, see Test Method F 386.

4.12 *Conditioning Room or Cabinet*, equipped with automatic temperature and humidity controls that will maintain 73.4 ± 3.6°F (23 ± 2°C) and 50 ± 5 % relative humidity.

5. Hazards

5.1 A new medicine dropper or pipette should be used for each test reagent. If the same reagent dispenser apparatus is to be reused, it shall be thoroughly cleaned in hot soapy water and alcohol, or both, prior to applying each different test reagent.

5.2 Check to be sure the colorimeter is properly warmed up and calibrated prior to use.

5.3 Be sure specimens are held flat when measuring color.

[1] This test method is under the jurisdiction of ASTM Committee F06 on Resilient Floor Coverings and is the direct responsibility of Subcommittee F06.30 on Test Methods—Performance.

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[2] *Annual Book of ASTM Standards*, Vol 06.01.

[3] *Annual Book of ASTM Standards*, Vol 15.04.