



Standard Test Method for Oil Migration or Plasticizer Bleed-Out of Preformed Tape Sealants¹

This standard is issued under the fixed designation C 772; 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 laboratory procedure that can be used to determine the oil migration or plasticizer bleed-out of preformed tape sealants.

1.2 The values stated in acceptable metric units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The subcommittee with jurisdiction is not aware of any similar ISO standard.

1.4 *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:*

C 717 Terminology of Building Seals and Sealants²

D 2203 Test Method for Staining from Sealants²

E 145 Specification for Gravity-Convection and Forced-Ventilation Ovens³

3. Terminology

3.1 *Definitions*—The definitions of the following terms used in this test method are found in Terminology C 717: preformed tape sealant, sealant.

4. Summary of Test Method

4.1 The preformed tape sealant to be tested is placed on filter paper. The specimen is heat aged and examined for migration into the filter paper.

5. Significance and Use

5.1 Preformed tape sealants are tacky, deformable solids that are used under compression between two substrates in a variety of sealing applications. In general, oil migration or

plasticizer bleed-out is not desirable. However, in some limited instances, a controlled amount of plasticizer migration is sometimes desired in order to improve the penetration of the tape into the interstices of porous substrates. This test method is designed to indicate whether or not a preformed tape sealant exhibits oil or plasticizer migration and, if so, to what extent.

6. Apparatus

6.1 *Vented Air Circulating Oven*, that complies with Specification E 145 and is capable of aging samples at $70 \pm 2^\circ\text{C}$ ($158 \pm 3.6^\circ\text{F}$) or $100 \pm 2^\circ\text{C}$ ($212 \pm 3.6^\circ\text{F}$).

6.2 *Filter Paper*,⁴ six sheets, high-grade, rapid, 76 mm (3 in.) in diameter.

6.3 *Weight*, 1 kg (2.2 lb).

7. Sampling

7.1 Select a fresh roll of preformed tape sealant at least 13 mm (0.5 in.) wide and 3 mm (0.125 in.) thick. Remove a section of preformed tape sealant approximately 61 cm (2 ft) long from the roll and discard it.

8. Test Specimens

8.1 Prepare duplicate test specimens by cutting short lengths of preformed tape sealant with the release paper still in place and plying them together to form a solid pad having the minimum surface dimensions of 38 mm (1.5 in.) by 38 mm and 3 mm (0.125 in.) thick.

8.2 Place each pad of preformed tape sealant on a piece of filter paper with the release paper side up.

8.3 Ensure adequate contact between the preformed tape sealant and the filter paper on each specimen by placing the 1-kg (2.2-lb) weight on top of the preformed tape sealant for 5 s.

9. Procedure

9.1 Place two additional pieces of filter paper under each of these test specimens.

¹ This test method is under the jurisdiction of ASTM Committee C24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.20 on General Sealant Standards.

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² *Annual Book of ASTM Standards*, Vol 04.07.

³ *Annual Book of ASTM Standards*, Vol 14.04.

⁴ This test method was based on the use of Whatman No. 1 filter paper. The sole source of supply of the apparatus known to the committee at this time is Whatman Inc., 9 Bridewell Place, Clifton, NJ 07014. 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,¹ which you may attend.