



Designation: ~~C771-97~~ Designation: **C 771 – 03 (Reapproved 2009)**

## Standard Test Method for Weight Loss After Heat Aging of Preformed Tape Sealants<sup>1</sup>

This standard is issued under the fixed designation C 771; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This test method covers a laboratory procedure for determining the weight loss after heat aging of preformed tape sealants.

NOTE 1—Test Method C 681 describes a weight loss or volatility test for knife-grade glazing compounds.

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.

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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:*<sup>2</sup>

C 681 [Test Method for Volatility of Oil- and Resin-Based, Knife-Grade, Channel Glazing Compounds](#)

C 717 [Terminology of Building Seals and Sealants](#)

E 145 [Specification for Gravity-Convection and Forced-Ventilation Ovens](#)

### 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 a tared metal plate and weighed. After heat aging, the specimen is weighed again. The difference in weight indicates the volatile content of the tape sealant.

<https://standards.iteh.ai/catalog/standards/sist/101dea25-a608-45a4-bbad-0016f2dac9a3/astm-c771-032009>

### 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. Compared to other types of sealants, that is, gunnable sealants and caulks, sealing tapes are designed to be essentially 100 % solids materials. In use, these tapes are intended to give long service with minimal weight loss or volatility. This procedure will give a measure of the weight loss of a preformed tape sealant after a controlled period of exposure at an elevated temperature.

### 6. Apparatus

6.1 *Balance*, calibrated to weigh specimens to the nearest 0.01 g.

6.2 *Thin Plates of Aluminum or Other Metal*, two, not less than 51 mm (2 in.) wide by 152 mm (6 in.) long, for each tape to be tested.

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

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee C-24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.50 on Tape Sealants.

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<sup>3</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* Vol 04.07, volume information, refer to the standard's Document Summary page on the ASTM website.