



Designation: ~~C712-93 (Reapproved 1997)~~ Designation: C 712 – 03 (Reapproved 2009)

Standard Test Method for Bubbling of One-Part, Elastomeric, Solvent-Release Type Sealants¹

This standard is issued under the fixed designation C 712; 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 determination of the degree of bubble formation or surface blistering in one-part, elastomeric solvent-release type sealants when exposed to elevated temperatures.

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1.2 The subcommittee with jurisdiction is not aware of any similar ISO 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:*

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

D 1191 [Test Methods for Concrete Joint Sealers](#)²

3. Terminology

3.1 *Definitions*—Refer to Terminology C 717 for definitions of the following terms used in this test method: compound, elastomer, elastomeric, sealant, solvent-release sealant, substrate.

4. Significance and Use

4.1 The type and amount of solvent used in these sealants can sometimes give rise to surface bubbling and blistering problems. The substrate used, whether porous or nonporous, will also have an effect. Although blistering is often caused by misapplication, this test method is useful in differentiating between a sealant that develops an acceptably smooth surface and one that may have blistering tendencies.

5. Apparatus

5.1 *Plates*, thin aluminum, approximately 3 in. (76 mm) wide by 5 in. (127 mm) long by 0.012 in. (0.30 mm) thick.

5.2 *Blocks*, cement mortar, approximately 2 in. (51 mm) wide by 4 in. (102 mm) long by 1 in. (25 mm) thick prepared as described in Test Methods D 1191.

NOTE 1—Other substrates such as brick, cast stone, marble, stainless steel, etc., may be specified either in place of the standard materials specified in 5.1 and 5.2 or in addition to them.

5.3 *Frame*, flat, rectangular, of 1/8-in. (3.2-mm) steel or brass, with an opening of 1 by 3 3/4 in. (25 by 95 mm) and outside dimensions of approximately 2 by 4 3/4 in. (51 by 121 mm).

5.4 *Spatula*, steel, with knife edge.

5.5 *Oven*, forced-draft type, having a temperature controlled at $122 \pm 3.6^\circ\text{F}$ ($50 \pm 2^\circ\text{C}$).

6. Test Specimen

6.1 Take the test specimen from a previously unopened container as received from the sealant manufacturer.

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: Test Methods.

Current edition approved July 15, 1993; Jan. 1, 2009. Published September 1993; March 2009. Originally published as C712-72; approved in 1972. Last previous edition C712-88; approved in 2003 as C 712 – 03.

² Withdrawn and replaced by D 5329.