



Designation: ~~C1304-95 (Reapproved 2001)~~ Designation: C 1304 – 08

## Standard Test Method for Assessing the Odor Emission of Thermal Insulation Materials<sup>1</sup>

This standard is issued under the fixed designation C 1304; 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 subjective determination of the existence, nature, and degree of odors present in all types of thermal insulation materials. This test method is not intended to evaluate the air quality aspects that any such odors may present.

1.2 The standard test condition for material evaluated under this test method is  $149 \pm 1.8^\circ\text{F}$  ( $65 \pm 1^\circ\text{C}$ ). Standard specifications referencing this test method may require other test conditions.

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.*

~~1.4 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.~~

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

### 2. Referenced Documents

2.1 *ASTM Standards:*

C 168 Terminology Relating to Thermal Insulation<sup>2</sup>

### 3. Significance and Use

3.1 Thermal insulating materials that produce objectionable odors could cause discomfort to persons occupying a structure insulated with such materials. Therefore, an examination to determine the odor potential of a particular insulation is desirable.

### 4. Apparatus

4.1 *Stainless Steel Containers or Glass Jars*, with all-metallic lids with air-tight seals are ~~recommended~~ required. Containers shall not produce discernible odors of their own. The volume of the container shall be 2.5 to 3 times the volume of the test specimen. Transparent containers ~~shall~~ will be wrapped with aluminum foil to eliminate visual bias.

NOTE 1—See 5.2 for the minimum mass requirement for the test specimen, which influences test container volume.

4.2 *Oven*, capable of maintaining a temperature of  $149 \pm 1.8^\circ\text{F}$  ( $65 \pm 1^\circ\text{C}$ ).

4.3 *Odor Assessment Panel*, consisting of five persons who have demonstrated the ability to detect odors both accurately and consistently. A guideline for selection of panelists is given in *ASTM STP 758*.<sup>3</sup>

4.4 *Odor- and Draft-Free Area*, where the required oven is immediately accessible.

### 5. Sample Preparation

5.1 *Number of Tests*—Unless otherwise dictated by a specification standard, one specimen of the material is selected at random for testing. The sample shall be protected from contamination prior to testing. One empty container shall be used as a control for each sample tested.

5.2 *Specimen Size*—Test specimens shall have a minimum mass of 2 oz (57 g). Where applicable, the specimens shall be cut

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.31 on Chemical and Physical Properties.

~~Current edition approved Dec. 10, 1995. Published January 1996.~~

Current edition approved Oct. 1, 2008. Published October 2008. Originally approved in 1995. Last previous edition approved in 2001 as C 1304-95(2001).

<sup>2</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 04.06 volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> "Guidelines for the Selection and Training of Sensory Panel Members," *ASTM STP 758*, ASTM, 1981.