



#### 4. TEST SPECIMENS AND CONDITIONING

Test specimens shall be representative of the material or composite being evaluated. Test specimens shall have a surface area (including all surfaces) of  $250 \text{ cm}^2 \pm 25 \text{ cm}^2$  ( $0.28 \text{ ft}^2 \pm 0.028 \text{ ft}^2$ ). Test specimens can be cut to any dimension compatible to the dimensions of the jar, provided the specimen surface area is maintained at  $250 \text{ cm}^2$ .

Prior to the test, the specimens shall be conditioned for 24 hours at  $23 \text{ }^\circ\text{C} \pm 2^\circ\text{C}$  ( $70 \text{ }^\circ\text{F} \pm 2 \text{ }^\circ\text{F}$ ) and  $50\% \text{ RH} \pm 5\% \text{ RH}$ .

#### 5. PROCEDURE

- 5.1 To avoid contamination, thoroughly clean the jars (including lids and rings). Rinse the jars with hot water. Scrub the jars with a laboratory glassware detergent. Rinse thoroughly with cold water.
- 5.2 Samples are to be tested dry and in the presence of moisture. For the dry test, place a test specimen in a jar and cover with the lid and ring. For the wet test, put 2 cc of distilled water directly on the specimen after the specimen has been placed in the jar and cover with the lid and ring. Include one empty jar for control use purposes closed with a lid and ring.
- 5.3 Place the jars in an oven preheated to  $65 \text{ }^\circ\text{C} \pm 3 \text{ }^\circ\text{C}$  ( $149 \text{ }^\circ\text{F} \pm 5 \text{ }^\circ\text{F}$ ) for 1 hour ( $\pm 5$  minutes). This temperature was selected to be representative of automotive applications. However, at the discretion of the test engineer, the temperature can be modified to any temperature or set of temperatures.

**CAUTION:** This test shall not be used to test materials that will release toxic fumes. The test engineer must be aware of the chemical composition and any potential reactions of the materials being tested. All necessary precautions must be taken to avoid inhalation of noxious fumes.

- 5.4 Remove the jars after one hour of oven heating time. The first panelist shall position his head near the control jar (approximately 15 cm away) and remove the lid. Then, with a cupped hand, he shall draw the air from the jar to his nose and slowly inhale. He shall then immediately repeat the procedure for the first test specimen (dry) and record the appropriate rating listed in Section 6. Lids shall not be off the jars longer than 5 seconds. Tests must be conducted in an environment free from drafts and contaminant odors.
- 5.5 Wait 2 minutes and repeat step 5.4 for the wet test specimens.
- 5.6 Repeat steps 5.4 and 5.5 for each sample.
- 5.7 Replace the jars in the oven for 15 minutes between observers and repeat steps 5.4, 5.5, and 5.6 for at least three panelists.
- 5.8 Report description of test samples, median and range of ratings, and any deviations from the test procedure.

#### 6. ODOR SCALE

See Table 1.

TABLE 1 - ODOR SCALE

Rating	Description
1	No noticeable odor
2	Slight, but noticeable odor
3	Definite odor, but not strong enough to be offensive
4	Strong offensive odor
5	Very strong offensive odor