

**RESISTANCE TO ACID SPOTTING OF PAINTED TEST PANELS  
OR ACTUAL FINISHED PARTS****Application**

This procedure is used to determine the resistance of painted panels or finished parts to acid spotting.

**Apparatus Required**

**Watch Glasses** - used to cover the test area

**Sulphuric Acid** - 3.0 to 4.0 pH

**Conditioning and Test Conditions**

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 72 h prior to testing and tested under the same conditions unless otherwise specified.

**Procedure**

1. Prepare a paint panel with finished coat of test enamel as described in Ford Laboratory Test Method BI 103-02, or use actual parts.
2. Place the prepared paint panel or part, horizontally, in a conventional air circulating paint bake oven at 37 +/- 2 °C metal temperature for 24 h.
3. Place 5 spots 8-10 mm in diameter of sulfuric acid on a painted panel at 10 minute intervals. Place watch glass on each test area.
4. After a total elapsed time of 30 minutes, remove the test panel or part from the oven. Remove the watch glasses. Rinse off with tap water any remaining residue.

| Date       | Action  | Revisions                                  |
|------------|---------|--------------------------------------------|
|            |         |                                            |
| 2001 03 19 | Revised | Editorial – no technical change A. Cockman |
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5. There should now be three acid treated areas on the panel or part: 10 minutes, 20 minutes and 30 minutes acid exposure.
6. Examine test areas for discoloration.
7. Compare with master approved sample on file in Body Materials Engineering Department and report results per relevant Engineering Materials Specification.
8. Repeat steps 1 thru 7 except place panel or part in bake oven at 55 +/- 2 °C metal temperature for 24 h.

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.