

(R) TEST METHOD FOR WICKING OF AUTOMOTIVE FABRICS AND FIBROUS MATERIALS

Foreword—This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

1. **Scope**—This SAE Standard is applicable for determining the wicking characteristics of seat fabrics, convertible tops, headlining, fiber padding, and other automotive textile materials.

2. **References**—There are no referenced publications specified herein.

3. **Apparatus and Materials Required**

3.1 **Indelible pencil**

3.2 **Solutions**

- a. 100 mg fluorescein dye (fluorescein sodium salt, "Uramine" or equivalent) dissolved in 1000 mL of distilled water (pH 7 max).
- b. 50% fluorescein dye as in solution (a); 50% alkyl aryl sulfonate solution (10 g of "Nacconal 40F" or equivalent—40% alkyl aryl sulfonate dissolved in 1000 mL of distilled water—3.0 to 7.0 pH range).
- c. Distilled water.

3.3 **Apparatus for Suspending Specimens in Beakers**

3.4 **UV Lamp**

4. **Test Specimens**—Cut strips of material to be tested 200 mm long and 51 mm wide, one set in the machine direction and another set in the cross-machine direction, then condition at 21 °C ± 2 °C and 50% ± 5% relative humidity for 24 h. Use a separate beaker for each sample.

5. **Procedure**—Draw a line with an indelible pencil 50 mm from end of specimens to be immersed. Prepare a suitable container with a 75 mm minimum depth of solutions (a), (b), or (c) as specified and immerse specimens to a point where upper meniscus just touches line marked with indelible pencil. Allow specimens to remain for a specified period in solution while maintaining solution to within 2 mm. Tests shall be run in a controlled atmosphere of 21 °C ± 2 °C and 50% ± 5% relative humidity.

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At the end of the specified period, remove specimens from test solution (a) or (b) and examine under "UV lamp¹". Travel of fluorescein dye above marked line indicates degree of wicking. Specimens tested in solution (c) shall be examined for wicking, migration, and discoloration under normal light.

For test in solution (c) use 4 mm notches instead of an indelible pencil line.

6. Notes

- 6.1 **Marginal Indicia**—The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

PREPARED BY THE SAE TEXTILES AND FLEXIBLE PLASTICS COMMITTEE

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1. Available from Hanovia Company.