

# SURFACE VEHICLE STANDARD

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## TEST METHOD FOR WICKING OF AUTOMOTIVE FABRICS AND FIBROUS MATERIALS

**Foreword**—This reaffirmed document has been changed only to reflect the new SAE Technical Standards Board format.

**1. Scope**—This test method 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**

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

**3.3** Apparatus for suspending samples in pan.

**3.4** A Black Light (Hanovia Lamp No. 16180 or equivalent).

**4. Test Specimens**—Cut strips of material to be tested 203 mm long and 51 mm wide, one set in the machine direction and another set in the cross-machine direction, then condition at  $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$  and  $50\% \pm 5\%$  relative humidity for 24 h.

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5. **Procedure**—Draw a line with an indelible pencil 51 mm from end of samples to be immersed. Prepare a suitable container with a 76 mm minimum depth of solutions (a), (b), or (c) as specified and immerse samples to a point where upper meniscus just touches line marked with indelible pencil. Allow samples to remain for a specified period in solution while maintaining solution to within 2 mm. Tests shall be run in a controlled atmosphere of  $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$  and  $50\% \pm 5\%$  relative humidity.

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

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