# RESISTANCE TO STAINING OF SEATING FABRICS

## Application

This procedure is used to determine the stain resistance of seating fabrics.

## Materials and Apparatus Required

**Soiling Agents**
Cola (non-diet), i.e. Coca-Cola® Classic
Instant Coffee (2 grams added to 100 ml boiling water). Apply coffee hot, above 65 ℃.
Milk - 2%
Deionized (DI) Water
Tap water

**Equipment**
Pipette (accurate to 0.05ml)
Beaker 400 ml
White cotton cloth (100% cotton), 300 x 300 mm

**AATCC Gray Scale**
10 step, according to AATCC Evaluation Procedure 2/ISO 105-A03.
For evaluation of color change

Available from: British Standards Institution
3 York Street
Manchester M2 2AT
United Kingdom

and

AATCC
P. O. Box 12215
Research Triangle Park
North Carolina 27709
U.S.A.
http://www.aatcc.org/technical/test_methods/scopes/ep1.cfm

**Spectrophotometer** – Delta E Value and aperture size using SAE J1767 – Instrumental Color Difference Measurements for Colorfastness of Automotive Interior Trim Materials, equipped with Aperture sizes of 1 in (25.4mm) and 1/4 in (6.35 mm).

## Sample and Test Conditions

**Sample Conditioning**
All test values indicated herein are based on material conditioned in a controlled atmosphere of 21 +/- 2 ℃ and 50 +/- 5% relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

| Date | Action | Revisions | Rev 04 |
|---|---|---|---|
| 2014 01 14 | Revised | See Summary of Revisions | M. Dumitrescu, FNA |
| 2013 06 05 | Revised | Editorial Change corrected Coca Cola® spelling | D. Murtonen, FNA |
| 2006 03 14 | Activated | | M. Dumitrescu, C. Leslie |



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## Test Procedure

### Method A

Fabric specimen size 200 x 300 mm, non-laminated and/or laminated with 3 mm foam

Apply one soiling agent per test specimen. Apply 0.2 ml of agent with the pipette in two separate locations on the sample and allow to dry at room temperature for 24 hours.

**NOTE**: Observe and record the reaction of the soiling agent when applied to the fabric, as described in Evaluation and Reporting section 1.

## Evaluation and Reporting

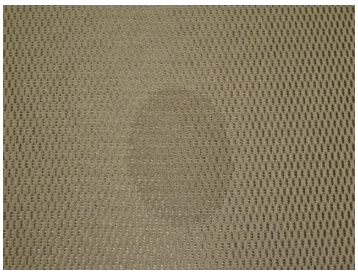
1. Report the absorption/reaction of the soiling agent to the fabric when it is applied, such as:
   a) quick absorption
   b) slow absorption
   c) repelled (bubble up, not absorbed into the fabric)

After 24 hours of drying, the following evaluations shall be conducted and noted in the test report.

2. If the soiling agent leaves a stain (photo 1) report the size of the stain after drying and conduct the evaluation using AATCC Gray Scale, Procedure 2 and instrumental color readings. Report the AATCC rating and the Delta E. Visual evaluation will take precedence over instrumental readings in cases of dispute.

3. A dehydrated small stain (approximately 10 mm) left at the “bubbled up” area is the dried residue of coffee or cola (photo 2), and milk (photo 3) and is acceptable. The acceptable stain will be noted in the lab report as follows: AATCC rating 5, repelled

Photo 1



Stain

Photo 2

Coffee/cola dehydrated stain

Photo 3

Milk dehydrated stain

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