

SOA S-101 (CF) Colorfastness Test Method

1. Scope

- 1.1 This test method describes laboratory procedures used for evaluating carpet cleaning solutions for colorfastness.
- 1.2 This method applies to all cleaning solutions.

2. Safety

- 2.1 This practice does not purport to address all the safety concerns, if any, associated with its use. It is the responsibility of the user of this practice to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

3. References

- 3.1 AATCC TM 16.3 Test Method for Colorfastness to Light: Xenon-Arc
- 3.2 SOA S-100 Preparation of Solution and Test Method for pH and Optical Brightener
- 3.3 SOA Test Carpet Specifications

4. Terminology

- 4.1 Colorfastness – the level to which a chemical residue contributes to color change when exposed to accelerated light.

5. Apparatus and Materials

- 5.1 Xenon-Arc Lamp Fading Apparatus (optionally equipped with light monitors and control systems as specified in AATCC TM 16.3).
- 5.2 AATCC Blue Wool control cloth for determining fading units, as specified in AATCC TM 16.3.
- 5.3 Gray Scale for Color Change (AATCC EP1)
- 5.4 Card stock, as specified in AATCC TM 16.3.
- 5.5 Test masks, as specified in AATCC TM 16.3.
- 5.6 Black thermometer, as specified in AATCC TM 16.3.
- 5.7 Trigger pump spray bottle with adjustable spray nozzle.

6. Test Specimen

- 6.1 Test Carpet Description: Residential Cut Pile (See SOA Test Carpet Specifications)
- 6.2 Cut two samples of the test carpet. Test samples are 2.25 inches by 4.75 inches.
- 6.3 Label the test specimen with the test identification number.

7. Test Format

- 7.1 Prepare cleaning solution in accordance with SOA S-100 Preparation of Solution and Test Method for pH and Optical Brightener.
- 7.2 The cleaning solution is applied to one test carpet using a trigger pump spray. Cover entire surface area of test carpet with cleaning solution.
- 7.3 Allow the treated carpet to dry.
- 7.4 Subject the treated carpet and untreated control carpet to accelerated colorfastness testing in accordance with AATCC 16 Option 3 for 40 AATCC fading units.
- 7.5 Remove the treated carpet and untreated control carpet and allow to condition in a dark room for a minimum of 4 hours before evaluation.

8. Evaluation

- 8.1 Grade treated carpet using the AATCC Gray Scale for Color Change in accordance with AATCC EP1 using the untreated carpet as the control.

9. Report

- 9.1 Record the Gray Scale grade. The Gray Scale result is the final result for colorfastness.
- 9.2 Any deviations from this test method.