

**TEST FOR STAINING OF PAINT BY WATER EXTRACTABLE INGREDIENTS IN RUBBER****Application**

This method is used to determine the staining of paint by extractable ingredients in rubber, elastomers, sponge rubber, etc.

**Apparatus and Materials Required****Test Apparatus**

See drawing.

**Fluorescent Sunlamp Cabinet**

A modified oven equipped with four Westinghouse FS 20T-12 fluorescent sunlamps is required.

**Oven**

Approximate internal dimensions 725 mm wide, 610 mm deep, 520 mm high and capable of maintaining a temperature of 60 +/- 3 °C.

A Grieves-Hendry Oven, Model PL-1 is suitable.

The oven is to be equipped with thermostat control and a red pilot light.

**Sunlamp Fixture**

To be completely installed in the cabinet. 20 gauge steel box with screw cover. One 20 watt high power factor ballast for each two lamps. Four fluorescent starter assemblies. Cover - 20 gauge steel with Alzak aluminum reflector overlay. Four pairs fluorescent lamp holders. Four Westinghouse FS 20T12 fluorescent sunlamps.

Source: Ster-L-Ray Sales and Services  
5803 Elizabeth  
Allen Park, MI 48101 USA

**Distilled Water****Cotton Thread**

Undyed and unimpregnated.

| Date       | Action  | Revisions                                  |
|------------|---------|--------------------------------------------|
| 2001 08 22 | Revised | Editorial – no technical change A. Cockman |
| 1994 02 28 |         |                                            |

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**2 % Soap Solution**

S-M1B4 in deionized water.

**Filter Paper**

**Painted Panels (80 x 250 mm)**

Painted panels shall be prepared as described in FLTM BI 103-02, Method C, using white or light-grey production enamel. The painted panel shall be aged 16 hours at 45 +/- 2 °C or 72 hours at 23 +/- 2 °C before the test and must be used within 60 days after ageing.

**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 24 h prior to testing and tested under the same conditions unless otherwise specified.

**Procedure**

1. Cut from finished part or slab stock a section 200 mm in length and mount as shown in drawing.
2. Boil approximately 200 mm length of the cotton thread in distilled water and rinse in distilled water at 23 +/- 2 °C.
3. Cut from filter paper a triangular piece of 50 mm edge length and place, together with cotton thread, on the painted panel as shown in drawing.
4. Use a 1 litre separating funnel as water reservoir. Adjust the outflow of distilled water to the rate of 1 litre in 24 +/- 1 hour. Fill the separating funnel with 1 litre of the distilled water and allow to drop until the funnel is empty.
5. Separate cotton thread, filter paper and rubber specimen from painted panel and place the panel in the fluorescent sunlamp cabinet for 4 hours at 60 +/- 3 °C and 300 mm from the light source.
6. Remove from sunlamp cabinet, cool to 23 +/- 2 °C and wash with the soap solution.

**Evaluation**

Examine painted panel for evidence of staining and determine as required by the material specification.

Note: Cotton thread, filter paper and painted panel shall be used once only.

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.