



COATING, TEMPORARY CORROSION PROTECTION, EXTERIOR CHROME PLATED AND STAINLESS STEEL PARTS

WSS-M99J56-A1

1. SCOPE

The material defined by this specification is a temporary corrosion protection coating suitable for use on chrome plated and stainless steel parts. It is removed with soap and water.

2. APPLICATION

This specification was released originally for material used to provide supplemental corrosion protection for exterior chrome plated and stainless steel components against surface damage during transportation prior to customer delivery.

2.1 LIMITATIONS

This coating provides protection for up to 6 months after application and is not intended for long term protection. Avoid overspray / incidental contact on painted or molded in color parts of the vehicle during the application of the coating.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements for Production Materials (WSS-M99P1111-A).

3.2 FUNCTIONAL APPROVAL

Materials being evaluated for approval to this specification shall be subjected to an application trial. Application trial results must be approved by the affected activity. Results shall be made available to Materials Engineering prior to material approval and release.

3.3 SAMPLE PREPARATION

3.3.1 Substrate - Chrome plated and stainless steel components.

Spray the surface to be coated with a 50/50 solution of isopropyl alcohol and water and wipe with a clean cloth to ensure the absence of oil or alkaline residues, fingerprints, dirt, moisture and other foreign materials.

3.3.2 Application Procedure

Spray the coating to the test surface to obtain a wet film thickness per 3.3.4. Spray equipment and application parameters can be obtained from the coating manufacturer.

Date	Action	Revisions	Rev. 0
2015 10 02	Released		



- | | | |
|-------|--|-----------------------------------|
| 3.3.3 | Application Temperature | 20 - 25 °C |
| 3.3.4 | Wet Film Thickness
(FLTM BI 156-01) | 50 - 75 microns |
| 3.3.5 | Curing, Air Dry
(23 +/- 2 C and 50 +/- 5% RH) | Dry to the touch
in 30 minutes |

3.4 APPEARANCE AFTER ENVIRONMENTAL EXPOSURE

(Allow at least 24 hours after coating application (23 +/- 2 C and 50 +/- 5% RH) before testing)

After each exposure, allow coated components to cool to room temperature.

Coating Removal: Pre-rinse the excess dirt and airborne contaminants from the test samples with water. Prepare a solution of soapy water (10 ml dish soap and 1 L water). Thoroughly soak a sponge or cotton cloth in the soapy water and wipe the surface of the component until the coating is removed. Rinse with water and dry with chamois or clean cotton cloth. Repeat removal procedure if coating is still visible.

Acceptance criteria: The test samples shall exhibit no staining, dulling, surface defects, coating residue, witness marks, or discoloration on chrome plated or stainless steel surfaces after coating removal.

- 3.4.1 Resistance to Weathering
(ASTM D7869, 300 hour)
- 3.4.2 Heat Resistance
(7 days at 80 +/- 2 °C)
- 3.4.3 Condensing Humidity Resistance
(FLTM BI 104-02, Method A, 120 h)
- 3.4.4 Environmental Cycle Resistance
(FLTM BQ 104-07, Procedure 1 or 10, 1 cycle)
- 3.4.5 Resistance to Etch/Fallout Damage

3.4.5.1 Acid Resistance

Test Method:

- Expose coated panels in Weatherometer per ASTM D7869 for 16 hours.
- Place two 25mm I.D. polyethylene washers (as a stencil) on the coated panel.
Completely fill the inside of one washer with Sulfuric acid H_2SO_4 adjusted to concentration 0.01 N. Completely fill the second washer with bee dropping mixture (47 g formic acid, 24 g tannic acid 10% in H_2O , 24 g honey and 5 g albumin 10% in H_2O)
- Place in oven at 80 °C for 4 hours.

3.4.5.2 Fluid Resistance (FLTM BI 168-01, Method B, Windshield Washer Fluid)

3.4.5.3 Iron Filling Staining Resistance

Scatter 5 g of #200 mesh iron filings on the test panel and place in an 80 +/- 2 °C oven for 4 h. Remove at completion and subject test panel to 24 h salt spray environment.

