



RUST PREVENTIVE, WATER BORNE

WSS-M7C90-B1

1. SCOPE

The material defined by this specification is a water borne rust preventive coating consisting of wax modified acrylic compounds. The coating is removable with an alkaline wash.

2. APPLICATION

This specification was released originally for material used to provide protection to the non-class A surfaces of chrome plated steel bumpers. The material dries to a soft, homogeneous film.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification requires the use of approved sources. Only the sources identified on the Ford Approved Source List (ASL) can be used when this specification is listed on the drawing, CAD file, or other documents. The list of approved sources is located within Ford at www.mats.ford.com or available externally through a Ford Materials Engineer.

3.2 PHYSICAL PROPERTIES

3.2.1 Non-volatiles (FLTM BI 102-01) 32%, min

3.2.2 Color (Visual) Black

3.2.3 Flash Point (ASTM D93) 93 °C, min

3.2.4 Shelf Stability 6 months, min

Heat greatly accelerates aging. The material shall be stored in closed containers away from all sources of heat. The shelf life of the material shall be 6 months from date of manufacture when stored below 38 °C. Suppliers indicating that shelf life can exceed 6 months shall present full specification package data to materials engineer showing compliance to the listed date. DO NOT FREEZE.

3.2.5 Weight per Volume (ASTM D1475) 1.01 +/- 0.03 kg/L

3.2.6 Viscosity, 20 RPM (ASTM D2196, Method B, use #5 spindle)

3.2.6.1 At 23 +/- 2 °C 6700 +/- 1500 mPa.s

3.2.6.2 At 38 +/- 2 °C 2700 +/- 500 mPa.s

Date	Action	Revisions	Rev. 0
2015 09 21	Released		



Documents

M. Katz, NA

Document Sharing Hub



3.3 PREPARATION OF TEST PANELS

3.3.1 Substrate

Use sections of chrome plated bumpers.

3.3.2 Application Procedure

Spray the test compound to a dry film thickness of 45 to 55 micrometers using an airless spray pump equipped with appropriate size orifice to produce a "flat" (in one plane) spray pattern.

3.3.3 Application Temperature

20 - 30 °C

3.3.4 Drying Time

At minimum film thickness, material must be tack free (no transfer of material to the fingertip after application of light pressure) after 38 minutes at 23 +/- 2 °C with no air circulation.

3.4 DRY FILM PROPERTIES

3.4.1 Dry Film Thickness (ASTM D1212)

35 micrometers, min

3.4.2 Crack Resistance (FLTM BJ 128-03)

No cracks, voids
or shrinkage are to be
evident.

3.5 RESISTANCE PROPERTIES

3.5.1 Laboratory Accelerated Cyclic Corrosion Testing (CETP 00.00-L-467, 6 weeks, ASTM D610)

Grade 6 max

The samples must be rated no worse than Grade 6 as defined by ASTM D610. Parts with sharp edges, recessed areas, rough surfaces, or welds may have reduced corrosion resistance at these locations.

Final judgment of corrosion performance should be based on visibility of the part as observed from the rear, engine compartment, or in the wheel wells of the vehicle as described by in RQT-001101-002492.

3.5.2 Resistance to UV Exposure (ASTM G154)

144 h

No mud cracking or other surface failure.

3.5.2.1 Laboratory Accelerated Cyclic Corrosion Testing (CETP 00.00-L-467, 6 weeks, ASTM D 610)

Grade 6 max
After UV Exposure

3.5.3 Resistance to Incidental Fluid Spotting (FLTM BI 168-01, Method B, Gasoline, Engine Oil, Deionized Water, Windshield Wash Fluid)

The finish shall not be removed or yellow.

