

**NVH, WATERBASED ACRYLIC, SPRAYABLE, PRIMER & PAINT
OVEN HEAT CURING****WSS-M4G446-A1****1. SCOPE**

The NVH materials defined by this specification are sprayable, primer and paint oven curing, which are applied in Paint Shop.

2. APPLICATION

These materials were originally released for damping of interior non-visible areas. The materials are applied to electrocoated surfaces.

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 SOLIDS 80.0% min
(FLTM BV 150-10)

3.3 ASH CONTENT See initial sample +/- 10%
(FLTM BV 150-10)

3.4 FLASHPOINT > 100 °C
(ASTM D 93, Method A)

Note: If testing at higher temperatures is not feasible because of gelling of test material, the supplier must certify in writing that each separate volatile ingredient has a flash point > 100 °C.

3.5 VISCOSITY AT 23 °C, [s]
(FLTM BV 103-01, 0.392MN/m² line pressure, nozzle diameter 2 mm)

3.5.1 As Received 15 - 25

3.5.2 After Aging 30 max
(14 days at 35 +/- 2 °C)

Note: Final approval of a specific viscosity of material for production shipments shall be made by the affected Manufacturing Division. In all cases, however, the viscosity shall be within the limits specified above and the material shall meet all requirements of this specification. Control Sample Laboratory Report.

Date	Action	Revisions	Rev 01
2017 01 04	Revision	See Summary of Revisions	W. Janitschke, EU
2015 04 02	Revision	See Summary of Revisions	W. Janitschke, EU
2007 09 25	Activated		W. Janitschke



3.6 TEST/CURING CONDITIONS

Use E-coated test panels acc. to FLTM BI 120-01, type C. The NVH material must be applied on the cured EC-coated test panel within 30 minutes after oven curing.

Use paint materials and curing conditions for the min and max curing cycles acc. to FLTM BV 150-05 for the applicable region, follow appropriate oven conditions for paint shop applied materials

3.7 PANEL SINK MARKS

No visible sink marks on black painted outer roof panel, where the material is applied on the inner side. The test panel is compared directly after aging to an unaged panel without material. Curing condition acc. 3.6

3.7.1 Cold Aging

The painted panel (500 x 500 x 0.8 mm) is applied with the NVH (200 x 300 x 3 mm), approximately 150 mm away from the edges.

Aging: 7 day at -40 +/- 1 °C

3.7.2 Heat Aging

The painted panel (420 x 440 x 0.8 mm) is applied with the NVH (230 x 170 x 3 mm), approximately 110 mm away from the edges.

Aging: 14 day at 90 +/- 2 °C

3.8 ADHESION

The material at all ranges of coating thickness shall not peel off in a coherent film.

Test Method:

Coat 300 x 100 mm test panels, prepared according to FLTM BI 120-01 in such a manner (airless) that after the

- a) min curing cycle and
- b) max curing cycle

According to paragraph 3.6, a dry coating thickness of 0.3 mm beginning at one edge of the test panel and increasing to 3 mm at the opposite edge.

After 24 h at 23 +/- 2 °C, make two cuts through the coating along the 300 mm length of the test panel and 30 mm apart. Try to peel off the coating starting at the edge with the lowest film thickness.