



COATING, HEAT RESISTANT, BLACK

WSB-M91J9-A

1. SCOPE

The material defined by this specification is a low reflective, heat stable black coating suitable for high temperature in confined areas after proper cure.

2. APPLICATION

This specification was released originally for material used for a low reflective coating on headlamp heat shields.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

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

3.4 COMPOSITION

3.4.1 Resin

Phenyl methyl polysiloxane resin.

3.4.2 Pigments

Inorganic, heat stable pigments suitable for high temperature applications as defined in the specification.

3.5 PHYSICAL PROPERTIES

3.5.1	Non-Volatile Content (FLTM BI 102-01)	59%
3.5.2	Weight per Volume (ASTM D 1475)	51%
3.5.3	Viscosity (ASTM D 3794, Zahn #2 cup)	22 - 28
3.5.4	Stability (FLTM BI 102-03)	Less than 10 s change in viscosity
3.5.5	Dry Hiding, max (FLTM BI 101-01)	20

Date	Action	Revisions
2005 09 12	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.9 and 4; Corrected numbering 3.8
1993 07 29	Released	NB00E10043054272



3.6 PREPARATION OF TEST PANELS

Actual production parts or clean chrome plated steel back side (deficient plating).

3.7 APPEARANCE

3.7.1 Color and Gloss
(FLTM BI 109-01/FLTM BI 110-01)

Shall match Ford Motor Company master panel, usually H or J gloss.

3.7.2 Leveling

The primer film shall level with a minimum of orange peel. The surface of the material under test shall be equal to or better than current approved production material for smoothness when applied and baked under identical conditions.

3.8 FILM PROPERTIES

3.8.1 Adhesion, min 3B
(ASTM D 3359, Method B)

3.8.2 Gloss
(FLTM BI 110-01, 60° glossmeter)

The gloss shall be specified by means of a letter suffix to the color number assigned by styling (listed below), or on the engineering drawing.

A	92 min	F	35 +/- 3
B	80 +/- 4	G	20 +/- 3
C	70 +/- 4	H	10 +/- 3
D	62 +/- 3	J	6 max
E	50 +/- 3		

3.8.3 Impact Resistance 1.4 J
(FLTM BI 108-01)

3.8.4 Salt Spray Resistance 96 h
(FLTM BI 103-01)

No failure in the specified times by blistering, rusting or more than 3 mm creepage from edges.

3.8.5 Heat Resistance No blisters or peeling

Place part in a laboratory furnace set below 200 °C. Heat to 350 +/- 5 °C and hold at temperature for 8 h. Remove from furnace and allow to stand at room temperature for 16 h. Repeat three times. There shall be no peeling, flaking or blistering of the paint film.