



ENAMEL, BAKING - VALVE ROCKER ARM COVER

ESE-M2J60-B

1. SCOPE

The material defined by this specification is a synthetic pigmented gloss baking enamel.

2. APPLICATION

This specification was released originally for enamel used on engine valve rocker covers where gasoline, oil, water, salt spray and humidity resistance is required. It is available in either a spraying grade or a dipping grade.

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 COMPOSITION

3.2.1 Vehicle

The fixed vehicle shall be an oil modified polybasic acid, polyhydric alcohol resin suitably modified with melamine and/or urea resins to meet the resistance requirements. The proportions of the hydrocarbons are to be so arranged that the enamel will level satisfactorily on spray applications.

3.2.2 The pigment shall be balanced and blended so that the finished enamel matches the Ford Motor Company master panel in color and luster and meets the requirements of this specification for durability.

3.2.3 Toxicity

The enamels shall not contain any benzol (benzene), chlorinated or other toxic compounds, or hydrolysable chlorine derivatives, or have an obnoxious or objectionable odor.

3.3 PHYSICAL PROPERTIES

3.3.1 Viscosity
(FLTM BI 111-01)

26 - 40 s

Date	Action	Revisions
2008 01 15	Revised	Updated Format, No Technical Change
2002 07 25	Revised	Updated & Renumbered
1965 07 23	Released	C6E3-PR301943



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3.3.2 Hiding Power, Non-Metallics (FLTM BI 101-01)

Reduce to 20 s viscosity with M14J210. Wedge constant 0.002 in (0.05 mm) for black and 0.007 in (0.18 mm) for all other colors.

Organic pigments, max	16
Chrome, max	10
All other, max	12

3.3.3 Hiding Power, Metallics (FLTM BI 101-01)

Complete hiding at a dry film thickness of 0.001 in (25 µm).

3.3.4 Non-Volatile Solids, min (FLTM BI 102-01)

All metallic colors	42%
Black	44%
Dark colors	44%
Colors with organic pigment	44%
Light colors (over 80 % TiO ₂ in pigment)	46%
Pure chrome colors	50%

3.3.5 Storage Stability

The material shall not jell or liver upon standing.

Test Method: Place a 3/4 full sealed pt (0.5 l) can of the material in an oven for 16 h at 60 +/- 1 °C. An increase in viscosity (over 10 s) shall indicate non-stability.

3.3.6 Resistance to Aeration (Dipping Grade Only) (FLTM BI 016-02)

The material shall not increase in viscosity over 5 s after being aerated for 72 h.

3.4 PREPARATION OF TEST PANELS

Prepare phosphated panels in accordance with FLTM BI 103-02, method "E". Reduce with M14J210 to 22 s for spraying. Film thickness 1 - 1.5 mils (26 - 38 µm) dry, bake 20 min at 121 +/- 2 °C or 17 min at 129 +/- 2 °C.