



PRIMER, LOW TEMPERATURE BAKE - CHROMIUM PLATING RESIST - ABS PLASTIC

ESB-M6J124-A

1. SCOPE

The material defined by this specification is a low bake primer suitable for application to Acrylonitrile Butadiene Styrene (ABS) plastic, as a resist coating for selective painting and electroplating.

2. APPLICATION

This specification was released originally for primers used on grilles, headlamps doors, moldings and ornaments, for interior or exterior application.

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 PHYSICAL PROPERTIES

3.2.1 Non-Volatile Solids (FLTM BI 102-01)

To be established by the vendor on the initial approved production batch. Tolerance to be +/- 0.5%.

3.2.2 Viscosity (FLTM BI 111-01)

Shall be established by the vendor on the initial approved production batch. Tolerance shall be +/- 5 s.

3.2.3 Stability (FLTM BI 102-03)

The material shall not liver or jell upon standing and must be free from settling which is not dispersed by normal agitation. The viscosity of the material shall not increase more than 10 s.

3.2.4 Toxicity

The primer shall contain no benzol (benzene), chlorinated or other toxic compounds, or hydrolyzable chlorine derivatives nor have an obnoxious or objectionable odor.

3.2.5 Hiding (FLTM BI 001-04)

Shall provide complete opacity at 0.00075 in (19 µm) dry film thickness.

Date	Action	Revisions
2008 04 21	Revised	Revised 4; Format Updated
2002 07 26	Revised	Updated & Renumbered
1970 06 25		Released AZ1-1379





3.3 PREPARATION OF TEST SAMPLES

Prepare samples per FLTM BI 103-02, Method "E" except use plastic in place of steel. Mask the ABS plastic sample, apply paint on approximately 1/2 of the exterior surface, and chromium plate the remainder of the sample to ESB-M1P47. In addition to the requirements in the test method, the following shall apply:

3.3.1 Substrate

Plating grade molded ABS plastic. (See paragraph 4.3).

3.3.2 Reducing Thinner

As recommended by supplier.

3.3.3 Spray Viscosity

(FLTM BI 111-01, #4 Ford Cup)

15 - 20 s

3.3.4 Film Thickness, min

(FLTM BI 117-01)

0.0005 in (13 μ m)

3.3.5 Drying

When work area is properly ventilated and a temperature of 23 +/- 2 °C is maintained, the material shall dry tack free in 15 min, and fully cure within 24 h, or fully cure in 30 min at 71 °C.

3.3.6 Aging

Age the panels for 16 h at 60 +/- 2 °C or 72 h at 23 +/- 2 °C before testing to paragraph 3.5 and 3.6.

3.4 APPEARANCE

The material, when properly applied shall dry to a smooth homogeneous film, free from mottling, pitting or excessive orange peel. No plating deposits on the paint film and only slight color and gloss change are permitted after chromium plating per ESB-M1P47.

3.5 FILM PROPERTIES

3.5.1 Adhesion

(FLTM BI 106-01)

3.5.1.1

Primer to Plastic

Prepare test samples per paragraph 3.3. Adhesion shall be satisfactory with no chipping, flaking or peeling.

3.5.1.2

Enamel to Primer

Prepare test samples per paragraph 3.3 of specification ESB-M1J76-A. Adhesion of ESB-M1J76-A enamel shall be satisfactory with no chipping, flaking or peeling.

