



TAPE, VINYL FILM - PRESSURE SENSITIVE - EXTERIOR

ESB-M3G51-B1

1. SCOPE

The material defined by this specification is a pressure sensitive, paper backed, vinyl film in both high and low gloss colors suitable for exterior applications. The film shall be capable of being color pigmented and/or silk screen printed using ESB-M99J262 silk-screen pastes.

2. APPLICATION

This specification was released originally for material used for application over bright metal or painted surfaces for exterior decorative appearance.

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 PHYSICAL PROPERTIES

3.4.1	Tensile Strength, min (ASTM D 882, Method A, 25 x 150 mm sample, 50 mm distance bench marks, jaw spaced at start 100 mm pulling speed 50 mm/minute)	1000 psi (6.9 MPa)
3.4.1.1	Elongation, min	
	Metallic and low Gloss Black Film	15%
	Non-metallic Film	35%
3.4.2	Tear Strength, min (ASTM D 1936)	2.5 N/mm width
3.4.3	Adhesion, min (ASTM D 100, except determine adhesion to anodized aluminum, stainless steel, chromium plating, ESB-M32J quality and ESB-M50J quality high gloss enameled steel)	
	As received	328 N/m width
	Aged	547 N/m width

Date	Action	Revisions
2005 09 21	Revised	Inserted 3.0; Corrected numbering, Deleted 3.1, 3.2, 3.3, 3.6, 4
1999 01 05	Revised	Deleted B2; Completely revised & updated
1978 05 05	Activated	





Test Method: Expose duplicate samples to each of the following conditions:

- 72 h at 70 +/- 1 °C
- 400 h weatherometer per FLTM BO 101-01
- 168 h at 38 +/- 1 °C and 95 - 100% relative humidity
- 240 h water immersion per FLTM BI 104-01
- 10 cycles consisting of 4 h at 70 +/- 1 °C, 4 h at 38 +/- 1 °C and 95 - 100% relative humidity, and 16 h at - 29 +/- 1 °C.

Note: Samples shall be conditioned for 48 h at 23 +/- 2 °C and 50 +/- 5% relative humidity prior to exposure. Tests shall be completed within 4 h after removal from the conditioning environment.

3.5 FILM PROPERTIES

3.5.1 Appearance

Shall match the Ford Motor Company styling master sample.

3.5.2 Thickness (ASTM D 100)

Tape plus Adhesive 0.05 - 0.13 mm

Release Paper 0.10 - 0.20 mm

3.5.3 Gloss (FLTM BI 110-01)

The gloss of production material shall not vary more than +/- 7 units with a 60 (1 rad) gloss meter from the master sample approved by the Design Center. The gloss suffix assigned by the Design Center to any specific color does not correspond with A thru H gloss meter designation for other materials such as body enamels.

3.6 RESISTANCE PROPERTIES

3.6.1 Preparation of Test Panels

Except where otherwise noted, resistance property tests shall be conducted using appropriate size steel panels (75 x 150 mm minimum) freshly painted with ESB-M32J or ESB-M50J quality high gloss enamels per FLTM BI 103-02 Method C and on chromium plated panels as outlined in para of this specification. The test panels shall be solvent wiped with M14J147 petroleum naphtha prior to applying the film per the following procedure.

Peel of the backing paper from the film in a smooth, continuous motion. Do not pull the film from the paper.

Liberal apply wetting solution (1.3 ml/l of water) to panel.

Apply some wetting solution to adhesive side of film. Position the film on the panel.