



TAPE, VINYL - PRESSURE SENSITIVE

ESB-M3G51-A

1. SCOPE

The material defined by this specification is a pressure sensitive, paper backed, vinyl tape.

2. APPLICATION

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

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).

3.2 PHYSICAL PROPERTIES

- 3.2.1 Tensile Strength, min 1000 psi (6.9 MPa)
(ASTM D 882, Method "A", 1 x 6 in
(25 x 150 mm) sample, 2 in (50.8 mm)
distance bench marks, jaw spaced at
start 4 in (100 mm) pulling speed 2 in
(50 mm)/min)
- 3.2.2 Elongation, min
- | | |
|-------------------|-----|
| Metallic film | 15% |
| Non-metallic film | 35% |
- 3.2.3 Tear Strength, min 14 lb/in (2.5 N/mm) width
(ASTM D 1938)
- 3.2.4 Adhesion, min
(ASTM D 1000, except determine adhesion to anodized
aluminum, stainless steel, chromium plating and
ESB-M50J100 quality enameled steel)
- | | |
|------------------------------|--------------------------|
| As received | 30 oz/in (328 N/m) width |
| Aged, except stainless steel | 50 oz/in (547 N/m) width |
| Aged, stainless steel | 30 oz/in (328 N/m) width |

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.

Date	Action	Revisions
2005 09 20	Revised	Inserted 3.0; Deleted 3.1, 3.6, 4
1978 11 03		Metricated, Renumbered & Retyped
1963 06 05	Released	ASI #915 Original/s/G. M. World E. P. DePalma



- 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.

Samples shall be conditioned for 48 h at 23 +/- 2 °C prior to exposure. Tests shall be completed within 4 h after removal from the conditioning environment.

3.3 FILM PROPERTIES

3.3.1 Appearance

Shall match the Ford Motor Company Styling Master.

3.3.2 Thickness (ASTM D 1000)

Vinyl Tape 0.002-0.005 in (0.05-0.13 mm)

Release Paper 0.004-0.008 in (0.10-0.20 mm)

3.4 RESISTANCE PROPERTIES

3.4.1 Sample Preparation

Except where otherwise noted, resistance properties tests shall be conducted using appropriate sized steel panels (3 x 6 in (75 x 150 mm) painted with ESB-M50J100 quality enamel. The film shall be applied using assembly plant techniques and shall fully cover the face of the panel allowing a 1/8-1/4 in (3.2-6.4 mm) border around the periphery of the panel. Samples shall be conditioned for 48 h at 23 +/- 2 °C prior to starting the tests.

3.4.2 Heat Resistance, max 1.0% shrinkage

No evidence of cracking, checking, or color change after exposure for 30 minutes at 121 +/- 3 °C. The test shall be conducted 2 h after application of a 1 x 10 in (25 x 250 mm) strip of the material to a 4 x 12 in (100 x 300 mm) ESB-M50J100 quality enameled steel panel.

3.4.3 Weather Resistance

Minimum degree of fading, chalking, or dulling. No increase of brittleness or loss of adhesion is permitted and the material shall be completely free from evidence of cracking, checking, blistering, or peeling when exposed as follows:

Florida Exposure, Miami Area, min 12 mo.
(5 ° facing south)

Accelerated Weathering, min 400 h
(FLTM BO 101-01, Atlas Weatherometer)