



TAPE, POLYURETHANE FOAM, PRESSURE SENSITIVE-SINGLE COATED

ESB-M3G85-A

1. SCOPE

The material defined by this specification is a polyurethane foam coated on one side with a pressure sensitive adhesive and protected with release paper.

2. APPLICATION

This specification was released originally for material used to prevent rattles.

Type I Material was released originally as an anti-rattler for the magnetic latch on a luggage compartment door lock cylinder.

Type II Material is a more flexible, compressible anti-rattler used in interior applications.

3. REQUIREMENTS

ESB-M3G85-A specification shown without type designation will be understood to be Type I.

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).

	Type I	Type II
3.2 DENSITY: lb/ft ³ (kg/m ³) (ASTM D 1667)	13.0-19.0 (200-300)	1.5-2.2 (24-35)
3.3 TENSILE STRENGTH: min, psi (kPa) (ASTM D 1564, Die "A")	100 (690)	18 (124)
3.3.1 Elongation: min, %	50	300
3.4 HARDNESS: Durometer "OO" (ASTM D 2240)	65-85	7-13
3.5 TEAR RESISTANCE: min, lb/in (N/m) (ASTM D 624, Die "C")	14 (2450)	3 (525)
3.6 COMPRESSION SET: max, % (ASTM D 1564, Method "B")	--	25
3.7 25% COMPRESSION DEFLECTION: lb (N) (ASTM D 1564)	--	8-14 (36-62)

Date	Action	Revisions
2005 09 27	Revised	Inserted 3.0; Deleted 3.1, 3.15, 4
1978 04 28	Metricated & Retyped	CAH1-RD572066-22
1966 08 10	Released	SV1 #683





		<u>Type I</u>	<u>Type II</u>
3.8	PEEL ADHESION: min, oz/in (N/m) width (ASTM D 903) Test Method: Check adhesion to painted metal panels (ESB-M50J100-A quality white enamel). If foam fails internally before peeling occurs, the maximum values at the point of internal failure must be at least as great as 60 oz/in (660 N/m) of width.	60 (660)	60 (660)
3.9	AGED PEEL ADHESION: min, oz/in (N/m) width (ASTM D 903) Test Method: Check adhesion to painted metal panels (ESB-M50J100-A quality white enamel). Allow a 4 h recovery at 23 +/- 2 °C and 50 +/- 5% relative humidity before checking adhesion. If foam fails internally before peeling occurs, the maximum values at the point of internal failure must be at least as great as 60 oz/in (660 N/m) of width.		
3.9.1	72 h at 70 +/- 1 °C	Cohesive failure	--
3.9.2	2 weeks at 88 +/- 1 °C	--	20 (219)
3.9.3	2 weeks at 38 +/- 1 °C and 95-100% relative humidity	--	40 (438)
3.10	LOW TEMPERATURE FLEXIBILITY Test Method: Samples approximately 6 in (150 mm) in length shall be conditioned for 16 h at -29 °C and shall then be bent 180° (3.1 rad) around a 1.0 in (25.4 mm) diameter temperature conditioned mandrel.	Shall not crack or show any evidence of failure	
3.11	MIGRATION STAIN (FLTM BV 107-02) Test Method: The material shall be placed in intimate contact with a freshly painted light colored (white or light blue) enameled panel and also light colored vinyl trim material, ESB-M2F76, and subjected to 200 h in a fluorescent sun lamp cabinet described in FLTM BV 107-02.	None	None
3.12	FOAM DETERIORATION (FLTM BO 012-01) Test Method: Samples approximately 6 in (150 mm) in length shall be subjected to the autoclave aging and subsequently bent 180° (3.1 rad) around a 1/4 in (6.4 mm) diameter mandrel.	Shall show no evidence of foam breakdown in the form of cracking or crumbling	
3.13	ODOR No offensive odor in the "as received" condition or after the deterioration test, para 3.12.		
3.14	CELL STRUCTURE Shall have a homogeneous, medium sized cell structure with no large voids or hard spots.		