



TAPE, POLYETHYLENE FOAM, PRESSURE SENSITIVE

M3G233-A

1. SCOPE

The material defined by this specification is a cross-linked polyethylene, closed cell, weatherable 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 on vehicle doors to prevent chips and scratches from the door hitting hard objects during the assembly process. Easy removal after delivery to the selling dealer is required, up to one month after application.

3. REQUIREMENTS

Material specification requirements are to be used for initial qualification of materials.

3.1 QUALITY SYSTEM REQUIREMENTS

Material suppliers and part producers must conform to the Company's Quality System Requirements.

3.3 CONDITIONING AND TEST CONDITIONS

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5% relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

3.3 FOAM PROPERTIES

3.3.1	Density, min, kg/m ³ (ASTM D 3575-W)	30
3.3.2	Thickness, min, mm	12
3.3.3	Tensile Strength, min, kPa (ASTM D 3575-T, Die "A")	240
3.3.3.1	Elongation, min, %	140
3.3.4	Tear Strength, min, kg/cm (ASTM D 3575-G, Die "C")	1.4
3.3.5	Compression Set, max, % (ASTM D 3575-B, Method "B")	30
3.3.6	25% Compression Deflection, min, kg/cm ² (ASTM D 3575-D)	0.42

Date	Action	Revisions
2010 12 16	Re-Activated	It is still used Globally at all Assembly Plants and was inadvertently Inactivated T. Honey, NA
2010 09 28	Inactive	No replacement named L. Sinclair, NA
1999 09 29	Activated	



- 3.3.7 Peel Adhesion, min, N/m width (ASTM D 903) 3.0

Test Method: Check adhesion to painted metal panels representative of current production quality white and black enamel. If foam fails internally before peeling occurs, the test is rated as failed.

- 3.3.8 Aged Peel Adhesion, min, N/m width (ASTM D 903) 3.0

Test Method: Check adhesion to painted metal panels representative of current production quality white and black enamel. If foam fails internally before peeling occurs, the test is rated as failed. Check adhesion immediately following removal from the specified condition. No adhesive is permitted left on the painted panel after removal, and no noticeable blistering, dulling, staining, or worm tracking of the painted surface is permitted.

ADHESION FORCE

- | | | |
|---------|--|------|
| 3.3.8.1 | 2 weeks at -25 +/- 1 °C | 3.0 |
| 3.3.8.2 | 2 weeks at 60 +/- 1 °C | 9.0 |
| 3.3.8.3 | 2 weeks at 38 +/- 1 °C and 95-100% relative humidity | 11.0 |
- 3.3.9 Outdoor Weathering, min Jacksonville, Florida Area Horizontal, Direct Weathering, Facing South 1 month

Test Method: Expose foam part on painted metal panels representative of current production quality white and black enamel and check adhesion after exposure. A value no greater than 11.0 N/m by width should be obtained. If foam fails internally before peeling occurs, the test is rated as failed. No adhesive is permitted left on the painted panel after removal, and no noticeable blistering, dulling, staining, or worm tracking of the painted surface is permitted.

- 3.3.10 Migration Stain (FLTM BV 107-02) None

Test Method: The material shall be placed in intimate contact with a freshly painted white and black colored enameled panels, and subjected to 200 h in a fluorescent sun lamp cabinet described in FLTM BV 107-02.

- 3.3.11 Foam Deterioration (FLTM BO 012-01) Shall show no evidence of foam breakdown in the form of cracking or crumbling

Test Method: Samples approximately 150 mm in length shall be subjected to the autoclave aging and subsequently bent 180 deg (3.1 rad) around a 6.4 mm diameter mandrel.