



TAPE, BUTYL, PRESSURE SENSITIVE, EXTRUDED

WSB-M3G209-A

1. SCOPE

The material defined by this specification is a pressure sensitive, extruded, elastomeric butyl tape with a release liner or specified laminate film on either side.

2. APPLICATION

This specification was released originally for material used to bond plastic mesh to an instrument panel defroster grille.

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 SPECIFIC GRAVITY 1.40 +/- 0.25
(ASTM D 792)

3.5 SOLIDS, min 95%
(ASTM D 2834, except use 100 °C for 3 h) (by weight)

3.6 ODOR, max 2 Rating
(SAE J1351)

3.7 NEEDLE PENETRATION 10 - 90 1/10 mm
(ASTM D 5, 100 g total load)

3.8 COLD FLEXIBILITY No cracking or delamination

Test Method: Condition a 150 x 10 x 10 mm strip of material for 4 h at -20 +/- 2 °C and bend 180° around a 25 mm mandrel conditioned at the same temperature.

3.9 HEAT STABILITY No sagging or delamination

Test Method: Bond a 150 x 150 mm sample of the material to each of two 300 x 300 mm production painted steel panels by applying a 1.5 kg load over the sample surface for 15 s. Suspend one panel vertically and one inverted in an oven maintained at 120 +/- 2 °C for 24 h.

3.10 ADHESION, min 3.6 N/cm

Test specimens exposed to the following conditions shall meet the above minimum requirement or demonstrate cohesive failure of the tape material.

Date	Action	Revisions
2006 02 08	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.14, 4
1992 08 06	Released	NBOOI10043054196 D. Henrickson, K. Minnich, B. Ferns



- 3.10.1 Original - 1 h after bonding
- 3.10.2 Original - 24 h after bonding
- 3.10.3 7 days at 90 +/- 2 °C
- 3.10.4 7 days at 38 +/- 2 °C and 95 - 100% relative humidity
- 3.10.5 2 cycles:
 - 4 h at 90 +/- 2 °C
 - 4 h at 38 +/- 2 °C and 95 - 100% relative humidity
 - 16 h at 30 +/- 2 °C
 - 4 h at 90 +/- 2 °C
 - 16 h at 30 +/- 2 °C

Test Method: Bond 25 x 125 mm samples to production substrate materials by rolling once with a 2.2 kg roller (leaving a 25 mm length unbonded for attaching to test fixture). The material should be backed with release paper or other specified film. Pull 90° to surface at a crosshead speed of 305 mm/minute within 1 h from completion of exposure.

Condition samples for para 3.10.3 - 3.10.5 for 24 h at 23 +/- 2 °C before exposing to environmental conditions.

3.11 BLOCKING RESISTANCE

The material shall separate easily with no tearing.

Test Method: Ply 5 layers of material, with release liner, 100 x 100 mm and cover with an aluminum plate of the same size. Apply a load of 6 kg and place in an oven for 14 days at 35 +/- 2 °C. Remove the weight and cover plate and examine plied samples for blocking.

3.12 FOGGING

(FLTM BO 116-03, 3 h at 100 °C)

Fog Number, min 60

The formation of droplets or coalescence into a clear film is cause for rejection.

3.13 FLAMMABILITY

(ISO 3795/SAE J369)

Burn Rate, max 100 mm/minute

5. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

5.1 STORAGE STABILITY

This material shall maintain specification performance for 180 days when stored at temperatures not exceeding 35 °C.