



ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

ADHESIVE TAPE, TWO SIDE PRESSURE SENSITIVE, EXTERIOR
ADHESIVE TAPE, TWO SIDE PRESSURE SENSITIVE, EXTERIOR

SK-M3G9521-A
SK-M3G9521-A2

1. SCOPE

The material defined by this specification is a polyethylene foam tape, coated on both sides with a homogeneous, age resistant, pressure sensitive adhesive. The adhesive surface, unless otherwise specified, is to be protected with a polyethylene or release liner.

2. APPLICATION

This material is generally used to retain exterior trim parts such as product identification letters, script ornaments, emblems and moldings etc.

Prior to the release for a particular application and in addition to the requirements specified herein, full evaluation as a component of specific trim products must be ensured by the affected Component Engineering activity.

3. REQUIREMENTS

Note: The material shall be conditioned for a minimum of 24 h in a controlled atmosphere of 23 +/- 2C and 50 +/- 5 % relative humidity prior to testing and tested under the same controlled conditions.

3.1 COLOR Black or as specified on Engineering drawing

3.2 THICKNESS See 5.3
(ASTM D 1000, without liner)

3.3 HARDNESS SHORE 'A'
(ASTM D 2240)

3.3.1 Original 40 +/- 10

3.3.2 After Ageing, max + 15 %
(70 h at 100 +/- 2 C)

3.4 TENSILE STRENGTH
(ASTM D 412, Die 'C')

3.4.1 Original, min 200 N/cm2

Date	Release No.	Released
1994 12 01		Revised and Retyped, was 17 pages
1985 03 14	B/001 676 TP	Added SK-M3G9521-A2, revised clause 1
1978 06 20	SM/EQ8373TP	Released

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3.4.2 After Ageing, max - 20 %
(70 h at 100 +/- 2 C)

3.4.3 After Water Immersion, max - 20 %
(16 h in distilled water of 23 +/- 2 C)

The specimens are to be tested immediately after removal from water immersion. They may be lightly blotted but not squeezed dry.

3.5 ELONGATION
(ASTM D 412, Die 'C')

3.5.1 Original, min

SK-M3G9521-A	430 %
SK-M3G9521-A2	300 %

3.5.2 After Ageing, max - 25 %
(70 h at 100 +/- 2 C)

3.5.3 After Water Immersion, max - 25 %
(For test method see 3.4.3)

3.6 TEAR STRENGTH
(ASTM D 624, Die 'B')

3.6.1 Original, min 100 N/cm

3.6.2 After Ageing, max - 20 %
(70 h at 100 +/- 2 C)

3.6.3 After Water Immersion, max - 20 %
(For test method see 3.4.3)

3.7 OZONE RESISTANCE Rating '0'
(FLTM EU-BP 1-1, 20 % elongation)

3.8 LOW TEMPERATURE FLEXIBILITY No cracking
(FLTM EU-BN 2-1 at - 40 C)

3.9 WATER ABSORPTION

3.9.1 Vacuum, max 6 %
(ASTM D 1056)

3.9.2 Static, max 5 %
(ASTM D 1056, 24 h, normal pressure)

3.10 MIGRATION STAINING None

Test Method: Apply the tape to a freshly white or light blue painted panel (FLTM EU-BI 3-2) and expose for 200 hours in the Fluorescent Sunlamp Cabinet (see FLTM EU-BU 52-2).



3.11 TENSILE STRENGTH, min

37 N/cm²

Test Method: Carefully bond the mating surfaces of two test blocks (see Fig.1) together and press down firmly to force out trapped air to ensure a good bond. Immediately after bonding clamp both ends in the jaws of a tensile tester and determine the tensile force required to separate the blocks. Rate of pull 300 mm/minute.

3.12 SHEAR ADHESION

3.12.1 Original, min

40 N/cm²

(14 d at room temperature)

3.12.2 After Heat Ageing

No loss of adhesion based on original value

(14 d at 70 +/- 2 C)

3.12.3 After Humidity Ageing, max

- 25 %

(14 d at 38 +/- 1 C and 98 +/- 2 % relative humidity)

3.12.4 After Environmental Cycling, max

- 25 %

(10 cycles, with one cycle consisting of 4 h at - 40 +/- 1 C, 4 h at 70 +/- 2 C and 16 h at 38 +/- 1 C and 98 +/- 2 % relative humidity)

Test Method: Carefully bond the mating surfaces of two specimens (see Fig. 2) together and press down firmly to force out trapped air to ensure a good bond. After 24 hours conditioning at room temperature, expose test specimens to above environments. For hours after completion of exposure, measure the shear strength in a tensile tester at a jaw separation rate of 25 mm/minute.

3.13 PEEL ADHESION, min

8 N/cm width

ASTM D 1000, except apply an approx. 0.025 mm polyester film or suitable equivalent to the unlined adhesive side of the tape before testing and determine adhesion at 3.14 rad (180 deg) to anodized aluminum, polished stainless steel, chromium plating and production quality enameled steel one hour after bonding.

Note: Test values must be determined on both the roll and liner side of the tape.