



TAPE MUSHROOM FASTENER,
BACK SIDE SELF ADHESIVE
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ESK-M3G150-A1
DELTA ESK-M3G150-B1

1. SCOPE

The materials defined by this specification are polyolefin mushroom tape fasteners, back side self adhesive and covered with release sheeting.

2. APPLICATION

These specifications were released originally for materials used to retain bumper parts to body.

3. REQUIREMENTS

3.1 QUALITY SYSTEM REQUIREMENTS

Material suppliers and part producers must conform to Quality System Requirements, QS-9000. Material specification requirements are to be used for initial qualification of materials. A Control Plan for ongoing production verification is required. This plan must be reviewed and approved by the relevant Ford Materials activity and/or Ford Supplier Technical Assistance (STA) prior to production parts submission. Appropriate statistical tools must be used to analyze process/product data and assure consistent processing of the materials.

Part producers using this material in their products, must use Ford approved materials and must conform to a process control plan which has been approved by STA and/or the relevant Materials Activity.

3.2 INFRARED SPECTROPHOTOMETRY AND/OR THERMAL ANALYSIS

Ford Motor Company, at its option, may conduct infrared and/or thermal analysis of material/parts supplied to this specification. The IR spectra and thermograms established for initial approval shall constitute the reference standard and shall be kept on file at the designated material laboratory. All samples shall produce IR spectra and thermograms that correspond to the reference standard when tested under the same conditions.

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.

Date	Action	Changes
1999 01 29	Revised	Deleted A2/B2; Revised & Updated K. Bruley
1994 11 29		Revised & Retyped, was 13 pages
1985 10 25	SM/EQ5573TP	Released



3.4 ADHESIVE BACKING

3.4.1 Peel Strength
(ASTM D 1000-82, clause 43 to 47 except enameled panel according to FLTM BI 103-02, method C; the tape has to be carefully bonded so that it will be in perfect alignment)

3.4.1.1 Original, min 20 N/cm

3.4.1.2 After Aging, max - 35 % based on
(14 d at 70 +/- 2 C, 1 h measured original
at room temperature) value

3.4.1.3 After Humidity Aging, max - 35 % based on
(16 h at 38 +/- 2 C and measured original
98 +/- 2 % relative value
humidity)

3.4.2 Shear Strength

Test Method: Bond the tape carefully to an enameled panel (prepared according to FLTM BI 103-02, Method C) so that it will be in perfect alignment. Bonding area shall be 15 x 15 mm. Clamp both ends of the assembly in the jaws of a tensile testing machine and determine the force required to separate the parts.

Separation rate 25 mm/minute.

3.4.2.1 Original, min 50 N/cm²
(1 h at room temperature
after bonding)

3.4.2.2 After Aging No loss of
(14 days at 70 adhesion
+/- 2 C, 1 h at room
temperature)

3.4.3 Softening Point, min 90 C
(ASTM D 816, except use specimens according to 3.1.2 and apply a force of 2.03 N to each specimen; maintain oven temperature at 50 C for 15 minutes and then increase 2.5 C/5 minutes until bond failure)