



ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

SEALER, VINYL, BODY FILLER, GRINDABLE, HEAT CURING

WSK-M4G332-A

1. SCOPE

The material defined by this specification is a polyvinylchloride (PVC) base, grindable body joint filler.

2. APPLICATION

This material was originally released for visible and non-visible C-pillar roof joints and is applied over phosphated or electrocoated body sheet metal.

3. REQUIREMENTS

3.1 STATISTICAL PROCESS

Suppliers must conform to the requirements of Ford Quality System Standard Q-101. A mutually acceptable Control Plan as described therein is required for material/source approval. Appropriate statistical tools must be used to analyze process/product data so that variation in the final product is continuously reduced.

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.

3.4 COLOR

White or as specified on
Engineering Drawing

Date	Release No.	Release/Revision
1991 10 01	EP00E01089489000	Revised 3.16 W. Scholz Conc. J. Schult
1991 07 01	EP00E01089486000	Released W. Scholz conc. J. Schult

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|-------|---|------------------|
| 3.5 | SOLIDS, min
(FLTM BV 150-10) | 98 % |
| 3.6 | ASH, max
(FLTM BV 150-10) | 45 % |
| 3.7 | DENSITY
(ASTM D 1475) | 1.6 +/- 0.2 kg/L |
| 3.8 | VISCOSITY
(FLTM BV 103-01, nozzle 2 mm,
343 kPa air pressure) | |
| 3.8.1 | As received | 45 - 65 s |
| 3.8.2 | After aging, max | 120 s |
| 3.9 | SHORE HARDNESS "A" | 75 - 95 |

Apply enough material to a test panel 300 x 60 mm, prepared according to FLTM BI 120-01, and scrape to a dimension of 30 x 5 mm thickness. Condition for 10 minutes at room temperature and expose in a mechanical convection oven at a temperature of 175 +/- 2 C for 30 minutes. Condition for four hours and check the shore hardness.

3.10 CURE CHARACTERISTICS

There shall be no evidence of plasticizer exudation or tackiness of filler surface. It shall not crack or chip from substrate upon bending as defined below.

Test Method:

- . Prepare 100 x 300 mm body steel panels under production conditions. (3 phosphate coated panels and 3 phosphate and electrocoated panels.)
- . Apply 300 x 20 x 2 mm material ribbons to the panels. (Filler must be applied to electrocoated substrate within 1 hour after baking.)
- . Condition for 10 minutes and bake as follows:
 - Phosphated Panels: According to FLTM BV 150-05, Table 1, min and max during cycle.
 - EC-Coated Panels: According to FLTM BV 150-05, Table 2, min and max curing cycle.
- . After cooling to 23 +/- 2 C bend specimens around a 50 mm mandrel to FLTM BV 153-03.