



ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

POLYVINYL CHLORIDE (PVC), DRY BLEND SLUSH
MOULDED SKIN

WSK-M4D621-A

1. SCOPE

The material defined by this specification is a UV and heat stabilized dry blend slush polyvinyl chloride moulded skin, which may be coated with a clear overspray.

2. APPLICATION

This specification was released originally for material used as decorative moulded skin for interior instrument panel covers.

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 APPEARANCE (FLTM BI 109-01)

The colour, pattern and finish shall match the approved Design Center master sample, or shall be as specified on the engineering drawing.

Date	Release No.	Release/Revision
1993 05 03	EP00E10258815000	Revised K. Gerhards
1991 12 02	EP00E01089491000	Last revision K. Gerhards
1988 12 15	SM/EQ1279 TP	Released K. Gerhards

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3.5 TEST SPECIMEN

Unless otherwise specified, all tests shall be conducted on specimens die cut from cured moulded skin.

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|---------|--|-------------------------------|
| 3.5.1 | Curing, min
(FLTM BO 157-01) | 30 minutes |
| 3.5.2 | Thickness
(ISO 4593/ASTM D 374, Method C) | 1.1 +/- 0.2 mm |
| 3.5.3 | Density
(ISO 1183 Method A/ASTM D 792,
Method A1) | 1.20 - 1.30 g/cm ³ |
| 3.5.4 | Hardness, Durometer A
(ISO 868/ASTM D 2240, solid compression
moulded specimens with smooth surfaces,
15 s delay) | 75 +/- 5 |
| 3.5.5 | Tensile Strength at Max Load, min
(ISO R 527, type 2/ASTM D 638 M,
type M-II, 100 mm/min test speed) | 10 MPa |
| 3.5.5.1 | Elongation at Break, min
(Test according to para 3.6.5) | 200 % |
| 3.5.5.2 | Tensile Modulus at
50 % Elongation, max | 8 MPa |
| 3.5.6 | Tear Strength, min
(ISO 34, Method B, Procedure a/
ASTM D 624, Die C, except 50 mm/minute
test speed) | 40 kN/m |
| 3.5.7 | Flexibility at - 20 C
(FLTM BN 102-01, except 180 deg
bend over 19 - 20 mm diameter
mandrel) | No cracks |
| 3.5.8 | Coating Adhesion
(FLTM BI 106-01, Method C,
applicable for coated materials only) | No chipping |
| 3.5.9 | Crocking
(FLTM BN 107-01) | Rating 5 |
| 3.5.10 | Soiling, max
(FLTM BN 112-01) | 15 % |
| 3.5.11 | Contact Staining
(FLTM BN 103-01) | |

The contact material shall not show any staining. Slight loss of gloss is permitted.