



ENGINEERING MATERIAL SPECIFICATION

Material Name	Specification Number
DEADENER SHEETING, HIGH TEMPERATURE FUSIBLE, 1.5 MM NOMINAL THICKNESS	WSK-M99G156-A1
DEADENER SHEETING, HIGH TEMPERATURE FUSIBLE, 2.0 MM NOMINAL THICKNESS	WSK-M99G156-A2
DEADENER SHEETING, HIGH TEMPERATURE FUSIBLE, 2.5 MM NOMINAL THICKNESS	WSK-M99G156-A3
DEADENER SHEETING, HIGH TEMPERATURE FUSIBLE, 4.0 MM NOMINAL THICKNESS	WSK-M99G156-A4

1. SCOPE

The materials defined by these specifications are deadener sheetings based on bitumen, synthetic resins and mineral fillers with an anti-blocking surface finish on one side.

2. APPLICATION

These specifications were released originally for materials used for heat bonding to electrocoated floor panels in the passenger compartment during primer oven exposure.

WSK-M99G156-A3/A4 are low density deadener sheetings.

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.

Date	Release No.	Release/Revision
1992-07-01	EP00E10176272000	Released C. Dittebrandt

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3.3 CONDITIONING

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 MATERIAL PROPERTIES

3.4.1 Composition

Bitumen, synthetic resins and mineral fillers, with an antiblocking surface on one side.

3.4.2 Solids, min 99 %
(FLTM BV 150-10)

3.4.3 Ash, max 85 %
(FLTM BV 150-10)

3.4.4 Thickness, mm
(ISO 4593)

WSK-M99G156-A1	1.3 - 1.7 mm
WSK-M99G156-A2	1.8 - 2.2 mm
WSK-M99G156-A3	2.3 - 2.7 mm
WSK-M99G156-A4	3.8 - 4.2 mm

3.4.5 Density
(ISO R 1183, Method A)

WSK-M99G156-A1/A2	1.60 - 2.00 g/cm ³
WSK-M99G156-A3/A4	1.20 - 1.60 g/cm ³

3.4.6 Color

Black or as specified on Engineering Drawing

3.5 PREPARATION OF TEST SPECIMENS

Substrate

Current production electrocoated steel panels

a) minimum heat curing 30 minutes at 135 C
b) maximum heat curing 60 minutes at 204 C

Use separate test assemblies for each curing cycle.

After curing condition to 23 +/- 2 C.



3.6 PHYSICAL PROPERTIES

3.6.1 Fogging
(FLTM BO 116-03)

Fog Number, min 60

Material evaluated after bonding to aluminium foil in a convection oven at 135 +/- 2 C for 30 min.

3.6.2 Odor

3.6.2.1 Original

Shall be free from objectionable or irritating odors, both in the "as received" condition and at application temperatures.

3.6.2.2 SAE J1351, max Rating 2

3.6.3 Flammability, max 100 mm/minute
(ISO 3795)3.6.4 Loss Factor, min see Table 1
(ASTM E 756)

Panel size: 240 x 10 x 0.8 mm

Material size: 216 x 10 mm

Cure test panels with minimum curing cycle. Prior to measurement condition 90 min at 23 +/- 2 C.

Calculate loss factor according to given test method.

3.6.5 Paintability

No chipping, blistering, no loss of adhesion. Discoloration or staining of the enamel permitted.

Test Method

Prior to painting press a 80 x 280 mm section of the material centrally to a 100 x 300 mm electrocoated panel and proceed as indicated in the relevant primer and paint specifications.

Apply primer and standard white enamel in a dry film thickness of about 25-30 micrometre. Do not sand primer.