ENGINEERING MATERIAL SPECIFICATION

Material Name	Specification Number
ADHESIVE, TWO PACK, EPOXY, SOLVENT FREE, REPAIR, COMP A	WSK-M2G400-A
ADHESIVE, TWO PACK, EPOXY, SOLVENT FREE, REPAIR, COMP B	WSK-M2G400-B

1. SCOPE

The materials defined by these specifications are the separate parts of a two pack, epoxy base, solvent-free and room temperature curing structural metal to metal adhesive.

WSK-M2G400-A is a modified epoxy resin based on Bisphenol A.
WSK-M2G400-B is a modified polyamine hardener.

2. APPLICATION

These specifications were released originally for materials used for bonding roof to body side panel (cold rolled steel, sanded and wiped by cleaning solvent) only for repair. Mechanical structural adhesive properties are dependent on bondline thickness.

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.

Date	Release No.	Release/Revision
1991 03 01	EP00E01089482000	Revised B Lange concurred J Schult
1990 06 01	EP00E01031536000	Released D-MB/PQ-13 B.Lange Conc. J. Schult

9009160 0009160 322

Copyright by the Ford Motor Company

Sun Aug 28 23:35:27 2016

Full document details: FORD WSK-M2G400-A 1991

Documents
Document Sharing Hub

3.4 COMPOSITION

3.4.1	Resin	WSK-M2G400-A	Modified epoxy, based on Bisphenol A
3.4.2	Hardener	WSK-M2G400-B	Modified polyamine
3.4.2	Pigments	WSK-M2G400-A/B	Pigments to obtain the desired colour

3.5 MATERIAL PROPERTIES

		WSK-M2G400-A	WSK-M2G400-B
3.5.1	Colour	Yellow	Blue
3.5.2	Solids, min (FLTM BV 150-10)	97 %	93 %
3.5.3	Ash, max (FLTM BV 150-10)	30 %	42 %
3.5.4	Density, kg/L (ASTM D 792)	1.2 - 1.5	1.2 - 1.5
3.5.5	Mixing Ratio, by Volume	100	100
3.5.6	Viscosity (FLTM BV 103-01)	< 60 s	< 180 s

3.6 FLOW, max (Fig. 1 of FLTM BV 153-01, freshly mixed components, test at 23 +/- 2 C) < 3 mm

3.7 PREPARATION OF TEST PANELS

3.7.1 Prior to application, metal surfaces must be cleaned with acetone to remove oils, dirt and moisture before and after sanding (grinding).

3.7.2 Application of Material by Tube Gun or Cartridge

Film Thickness: 0.1 - 7.0 mm
To be Cured: at 23 C for 48 h
or at 80 C for 30 minutes

3.8 RESISTANCE PROPERTIES

Test panels and parts prepared with materials according to this specification shall meet all requirements of performance specification WSK-M11P47-A.

9009160 0009161 269

Copyright by the Ford Motor Company

Sun Aug 28 23:35:27 2016

Documents
Document Sharing Hub

Full document details: FORD WSK-M2G400-A 1991