Engineering Material Specification

Material Name

ADHESIVE - POLYESTER, EPOXY MODIFIED

Specification Number

ESA-M2G221-A

1. SCOPE

The material defined by this specification is a two component, room temperature curing, epoxy modified polyester resin base adhesive.

2. APPLICATION

This material was released originally to bond urethane foam to vinyl for steering column firewall boats.

3. REQUIREMENTS

3.1 BOND STRENGTH (OVERLAP SHEAR), min

. 7 days at room temperature	345 KPa
. 14 days at 100°C	345 KPa
. 14 days at 125°C	345 KPa
. 14 days at 37 ± 1°C and 95-100% relative humidity	200 KPa

Test Method: Prepare overlap shear assemblies as follows:

(1) Coat one side of the 100 mm x 25.4 mm x 1.5 mm min with sufficient adhesive to obtain 640 mm^2 coverage. Hold open for 30 seconds. Bond both strips together obtaining an overlap joint of 640 mm^2. Roll assembled joint with firm hand pressure and apply a 500 gram dead load for 24 hours at room temperature.

(2) The overlap shear strength of the adhesive shall be determined by pulling the bonded assemblies in a tensile machine with a jaw separation of 50 mm per minute.

NOTE: The test material shall consist of any approved flexible vinyl.

3.2 INFRARED SPECTROPHOTOMETRY

Ford Motor Company, at its option, may conduct infrared analysis of material/parts supplied to this specification. The curves established for initial approval shall constitute the reference standard and shall be kept on file at Central Laboratory. All samples shall produce curves that correspond to the reference standard when tested under the same conditions as those specified on the master curve.

Date	Para. No.	Revisions	Approval
1979 06 20		RELEASED COH2-CSH2-823483-2	

9009160 0008631 149

Copyright by the Ford Motor Company

Fri Aug 26 13:39:36 2016

Full document details: FORD ESA-M2G221-A 1979

AVA Documents Document Sharing Hub

3.3 SUPPLIER'S RESPONSIBILITY

Material supplied to this specification must be equivalent to that originally approved. Changes in formulation or processing shall not be made without prior approval as described in Supplier Procedure I-A.

4. APPROVAL OF SUPPLIERS

Suppliers to this specification must be approved by the affected product engineering office. Procedure for gaining approval of a specific material to a new/existing ES-M specification is contained in Supplier Procedure I-A. Approved new suppliers will be added to the Engineering Materials Approved Source List.

9009160 0008632 085

Copyright by the Ford Motor Company

Fri Aug 26 13:39:36 2016

Documents
Document Sharing Hub

Full document details: FORD ESA-M2G221-A 1979