Automotive Systems

BETAMATE™ 73326M/73327M Structural Adhesive

Description

BETAMATE™ 73326M/73327M is a two component system used to produce a structural epoxy adhesive with added flexibility. This system was developed primarily for use in bonding untreated aluminum. The mix ratio for this system is one to one by volume.

Typical Applications

BETAMATE™ 73326M/73327M can be used for replacing welds, and/or mechanical fasteners in lap joint applications.

Application Technique

BETAMATE™ 73326M/73327M can be pumped with a follower plate from bulk containers into standard meter mix equipment. The proper mix ratio is in turn dispensed manually or robotically through a static mixer equipped gun.

Safety Precautions

Keep away from heat, sparks, and open flames. Use only with adequate ventilation. Avoid breathing vapors. If swallowed, call physician immediately. For eye contact, flush with water for 15 minutes and get medical attention. Refer to Material Safety Data Sheet for details.

Packaging

BETAMATE™ 73326M/73327M is available in 5 gallon metal pails and 55 gallon drums.

Storage

BETAMATE™ 73326M/73327M must be stored in dry containers at temperatures below 90˚F (32˚C). Product stored below 60˚F (15.5˚C) should be warmed to room temperature before using.

Storage Stability

Shelf life is dependent upon storage temperature of the material. Shelf stability is assured for 180 days from the date of shipment when stored according to the above storage requirements.

Uncured Physical Properties	73326M	73327M
Composition	Epoxy	Amine
Appearance	Black	Tan
% Solids	99.4	93.3
Flash Point, ˚F	>230	>230
Weight per Volume, lbs./gal.	11.8	10.1
Viscosity; cps@ 77˚F (25˚C) Brookfield HBT, Spindle #7; @ 10 RPM	624,000	182,000

Mixed Bead

Mix Ratio by Volume	1:1 Epoxy/Hardener
Gel Time, minutes	90
Open Time, minutes	120
Tack Free Time, minutes	180
Thixotrophy	Non Sag

Performance Properties

Lap Shear Testing (ASTM D1002)	Test Temperature 23˚C
Test Substrate	Bare Aluminum
Lap Shear Cure Condition: 1 hour at 23˚C and 50% relative humidity followed by 30 min. at 82˚C (180˚F) and 5 day post cure at 23˚C and 50% relative humidity. Bondline Thickness – 40 mil Overlap – 0.5”	Lap Shear (MPa) 990 (6.8) Failure Mode 100% Cohesive
Young’s Modulus (MPa): ISO 8256 type 3, Speed = 50.00 mm/min, T = 23°C	870
Strain at Break %: ISO 8256 type 3, Speed = 50.00 mm/min, T = 23°C	13

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HEADQUARTERS

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 All values are typical and not intended for specification use.