

The New Standard RAST NON-SAGGING ADHESIVE EPOXY COMBINED FEATURES

EPOXIES for Laminating Infusion Tooling Assembly This epoxy composition has been developed for adhesive applications where an extremely fast setting time is required. The flexibility of the cured resin permits the bonding of materials with different coefficients of thermal expansion with the minimum of stress in the glue line. Both resin and hardener are thixotropic pastes producing an almost colourless non-sagging mix.

An easy to use two part "five minute epoxy" system, ideal for quick repairs and general bonding around both the boat and house. Particularly suited for spot applications to hold component parts in position whilst bonding is completed with other PRO-SET Adhesives.

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ISO9001:2015 Certified

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©2024 Wessex Resins & Adhesives Most materials, except thermoplastics, can be bonded with this system, including: Steel, Aluminium, Glass reinforced polyester, Phenolic, Wood, Concrete, Stone, China, Glass, Copper, Cast Iron, Unglazed ceramic

Fast cure speed provides gelation in approximately 5 minutes at 25°C.

Room temperature cure properties suitable for many applications.

SURFACE PREPARATION

All surfaces to be bonded must be degreased with a solvent such as acetone or WEST SYSTEM 850 Cleaning Solvent, and abraded. Remove all sanding dust and debris with a clean brush. Another final wipe with a clean cloth soaked in fresh solvent will remove the last traces of grease and dust. Glass may be washed in detergent, flushed with clean water and air dried.

APPLICATION INSTRUCTIONS

Remove the retaining nut and plug from the two component cartridge, insert the dispensing nozzle and replace the retaining nut. Dispense using a two component dispensing gun into a suitable clean dry container and mix with a spatula or flat stick. Very small quantities may be mixed on a non-absorbent flat surface. Do not mix more than can be used in two minutes.

Immediately after mixing apply a thin film to both prepared surfaces. Press both surfaces together excluding all air and hold in position until the resin has set. At normal room temperature the strength of the bond will continue to develop for about seven days. The application of gentle heat will accelerate this development of maximum strength.

HANDLING PROPERTIES

Property	Standard	Units	7°C	25°C
100g Pot Life	ASTM D2471	minutes		4
Thin Film Gel Time		minutes	20	5
Minimum Cure Temperature	ASTM D2196	°C		5
Minimum Storage Temperature		°C		10

MIX RATIO

Method	Resin:Hardener	Resin:Hardener
Weight	1:1	100:100
Volume	1:1	100:100

DENSITY

State	Units	22°C
Resin	gcm-3	1.18
Hardener	gcm ⁻³	1.04
Mixed	gcm-3	1.12

MECHANICAL PROPERTIES

Property	Standard	Units	30 minutes	1 day	7 days
Lap Shear on Mild Steel/Mild Steel	ASTM D1002	MPa	2.07	3.45	5.52
Lap Shear on Copper/Copper	ASTM D1002	MPa	4.83	6.21	8.28
Lap Shear on Wood/Wood	ASTM D1002	MPa	2.76	3.45	5.86
Lap Shear on Aluminium/Aluminium	ASTM D1002	MPa	4.83	5.86	5.86
Class/Class (detergent week)		No breakdown in bond after 16 hours immersion in cold water			
		No breakdown in bond after 7 hours immersion in boiling water			

These are typical properties and cannot be construed as a specification. The end users should test the products to ensure the products are suitable for the intended application. Any information, data, advice or recommendation published by Wessex Resins or obtained from Wessex Resins by other means and whether relating to Wessex Resins' materials or other materials, is given in good faith and believed to be reliable.

M1057 / M2067 FAST NON-SAGGING ADHESIVE EPOXY

MECHANICAL PROPERTIES

Property	Standard	Units	22°C x 1 Week
Hardness	ASTM D2240	Shore D	82 (after 1 day)
Hardness	ASTM D2240	Shore D	85
Compression Yield	ASTM D695	MPa	59.8
Tensile Strength	ASTM D638	MPa	59
Tensile Modulus	ASTM D638	GPa	3.8
Tensile Elongation	ASTM D638	%	2.9
Flexural Strength	ASTM D790	MPa	95
Flexural Modulus	ASTM D790	GPa	3.3
Lap Shear on 1018 Steel	ASTM D1002	MPa	9.1
Lap Shear on 2024T Aluminium	ASTM D1002	MPa	7.3
Tensile Adhesion to 1018 Steel	ASTM D4541	MPa	30.0
Tensile Adhesion to 2024T Aluminium	ASTM D4541	MPa	33.4

THERMAL PROPERTIES

Property	Standard	Units	22°C x 1 Week
Tg DSC Onset - 1st Heat	ASTM E1356	°C	35
Tg DSC Ultimate	ASTM E1356	°C	40* ¹

*1 Additional post cure may be required; contact Technical Department for details.

Test specimens were neat epoxy (without fibre reinforcement).

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