

PRO-SET®

Technical Data

M1038~M2018

150°F T_g CLEAR COATING

EPOXY

The New
Standard

EPOXIES for
Laminating
Infusion
Tooling
Assembly

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ISO9001:2008 Certified

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COMBINED FEATURES

Medium viscosity for good wet out of all synthetic composite fabrics and core materials.

Slow cure speed hardener provides 3 to 4 hours of working time at 72°F (22°C).

Room temperature cure properties suitable for many composite components and structures.

Cures clear for clear coating applications over wood, carbon fiber or other surfaces where a clear coat is required.

T_g as high as 150°F (66°C) with proper post cure providing excellent temperature stability and great part cosmetics.

Cost effective, high performance epoxy formulation for synthetic composite manufacturing.

Quality-control tinting is available at no extra charge; simply add "QC" after the product code on your order.

Shelf life is 3 years for resin and 18 months for hardener when properly stored².

*Test specimens were neat epoxy (without fiber reinforcement).
Typical values, not to be construed as specification.*

HANDLING PROPERTIES

Property	Standard	Units	72°F (22°C)
100g Pot Life	ASTM D2471	minutes	22-28
Viscosity Mixed	ASTM D2196	cP	1,430
Viscosity (resin)	ASTM D2196	cP	3,300
Viscosity (hardener)	ASTM D2196	cP	235

MIX RATIO

Method	Resin:Hardener	Range	Resin:Hardener	Range
Weight	2.83:1	2.69:1–3.17:1	100:35.3	100:37.16–100:31.59
Volume	2.42:1	2.30:1–2.70:1	100:41.4	100:43.54–100:37.01

DENSITY

State	Units	72°F (22°C)
Cured	lb/gal (g/cc)	9.72 (1.16)

MECHANICAL PROPERTIES

Property	Standard	Units	72°F (22°C) x 2 wk
Hardness	ASTM D2240	Type D	84
Compression Yield	ASTM D695	psi (MPa)	14,200 (98)
Tensile Strength	ASTM D638	psi (MPa)	8,960 (62)
Tensile Modulus	ASTM D638	psi (MPa)	5.09E+05 (3.51)
Tensile Elongation	ASTM D638	%	2.3
Flexural Strength	ASTM D790	psi (MPa)	15,800 (109)
Flexural Modulus	ASTM D790	psi (MPa)	5.34E+05 (3.68)

THERMAL PROPERTIES

Property	Standard	Units	72°F (22°C) x 2 wk
Tg DSC Onset–1st Heat	ASTM E1356	°F (°C)	124 (51)
Heat Deflection Temperature	ASTM D648	°F (°C)	126 (52)
Ultimate Tg by DSC	ASTM E1356	°F (°C)	150 (66)

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

² Store PRO-SET® Epoxy resins and hardeners at room temperature in sealed containers until shortly before use. As with many high-performance epoxy resins, repeated exposure to low temperatures during storage may cause the resin to crystallize. If this occurs, warm the resin to 125° F and stir to dissolve crystals. Hardeners may form carbamation when exposed to CO₂ and moisture in the atmosphere for extended periods of time. Prevent carbamation by protecting hardeners from exposure until immediately prior to processing.