

DESCRIPTION

EL-360 is an undiluted, 100% solids epoxy system formulated for the applications of vacuum infusion molding, laminating, filament winding, pultrusion and compression molding. This system has excellent mechanical properties and good cure characteristics at ambient temperature. This EL-360 resin series gives the composites engineer a choice of three hardener options to work with; EL-360 fast hardener, EL-360-1 standard hardener and EL-360-2 slow hardener.

APPLICATIONS

- High performance composite tools or parts for marine, industrial, and several other industries
- Suitable for infusion processing along with wet-layup, vacuum bagging and RTM processes

PROPERTIES

- High Clarity
- Very Low mixed viscosity
- Variable pot life hardener options
- R.T. cure and post-cured options
- Excellent ultimate properties
- High performance

PHYSICAL PROPERTIES

Property	Units	EL-360 Resin	EL-360 Hardener	EL-360-1 Hardener	EL-360-2 Hardener
Mix ratio – by weight			100/27	100/30	100/32
Aspect		Liquid	Liquid	Liquid	Liquid
Color	Visual	Clear	Lt. Amber	Lt. Amber	Lt. Amber
Mixed Viscosity (25°C)	Cps	890	326	326	280
Specific Gravity – Mixed (25°C)	lbs./gal (g/cc)		9.65 (1.16)	9.57 (1.15)	9.49 (1.14)
Gel Time (200 g) at 77°F (25°C)	minutes		44	70	560 (100 g)

PROCESSING CONDITIONS

After mixing according to the indicated ratio, carry out impregnation of the reinforcements. To ensure an optimal use and a good impregnation, please use packaging stored at a temperature above 15 °C.



***Neat Cured Properties Tested at 74°F (23°C)**

	Test Method	Unit(s)	EL-360 Hardener	EL-360-1 Hardener	EL-360-2 Hardener
Tg (glass transition temperature) DSC - Method	ASTM D3418	°F (°C)	182 (83)	182 (83)	*170 (77)
Heat Deflection temperature @ 66 psi	ASTM D648	°F (°C)	167 (75)	167 (75)	*164 (73)
Flexural Strength	ASTM D790	psi (MPa)	17,733 (122)	17,733 (122)	19,040 (131)
Flexural Modulus	ASTM D790	psi (MPa)	460,000 (3,172)	460,000 (3,172)	450,000 (3,103)
Tensile Strength	ASTM D638	psi (MPa)	10,137 (70)	10,137 (70)	10,684 (74)
Tensile Modulus	ASTM D638	psi (MPa)	411,993 (2,814)	411,993 (2,814)	463,075 (3,193)
Tensile Elongation	ASTM-D638	%	5.0	5.0	4.0

* Cure - 24 hr/R.T. + 8hr/176°F (80°C)

** Cure - 24 hr/R.T. + 6hr/158°F (70°C)

STORAGE CONDITIONS

This product has a shelf life 12 months as indicated by the expiration date on the container when stored in original unopened containers between 59 – 77°F (15 – 25°C). Any opened can must be tightly closed.

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- Ensure good ventilation
- Wear gloves, and safety glasses

For additional information, please consult the Safety Data Sheet (SDS).

DISCLAIMER

The information contained in this technical data sheet results from research and tests conducted in our laboratories under precise conditions. Seller cannot anticipate all conditions under which seller's products, or the products of other manufacturers in combination with seller's products, may be used. It is the responsibility of the user to determine the suitability of the SikaAxson's products, under their own conditions, before commencing with the proposed application. In no event shall SikaAxson US be liable for any direct, indirect, punitive, incidental, special, and/or consequential damages, to property or life, whatsoever arising out of or connected with the use or misuse of our products.