

TECHNICAL DATA SHEET

EPOLAM 2015

EPOXY LAMINATING SYSTEM

LLOYD'S APPROVED, 550 CPS MIXED VISCOSITY

DESCRIPTION

Epolam 2015 is designed for production of composite structures by wet lay-up or possible infusion methods. Epolam 2015 is also well suited for wood impregnation and is approved per Lloyd's registration.

APPLICATIONS

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

PROPERTIES

- *High Clarity*
- *Suitable by Lloyds register for shipbuilding*
- *Colored resin/hardener/mix for improved mixing and color indication*
- *Low mixed viscosity / Good wet out*
- *Good mechanical properties*
- *Possible use for VARTM / Infusion processing - low viscosity and long pot life*

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES HANDLING					
Property	Test Method	Unit(s)	Epilam 2015 Resin	Epilam 2015 Hardener	Mixed System
Mix ratio – by weight Mix ratio – by volume					100/32 100/38
Aspect			Liquid	Liquid	Liquid
Color		Visual	Yellow	Blue	Green Translucent
Viscosity (25°C)		Cps	1,680	60	
Mixed Viscosity (25°C)		Cps			550
Specific Gravity (25°C)		lbs./gal (g/cc)	9.45 (1.14)	8.05 (.97)	8.98 (1.08)
Gel Time (150 g) at 77°F (25°C)		minutes			140

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 20 ° C.

CURE CONDITIONS

In order to avoid any risk of distortion or tooling shrinkage a precise curing cycle must be observed. Demolding takes place only after a 24 hour R.T. minimum + 16 hour pre-curing at 125°F – 140°F (52°C-60°C) self-supporting cure. Post-cure can then be carried in a non-supported or semi-supported state.

Neat Cured Properties Tested at 74°F (23°C)			
	Test Method	Unit(s)	Test Results
Glass Transition Temperature (Tg) *Cure #1 **Cure #2	ASTM E1545	°F (°C)	124 (51) 202 (94)
Hardness *Cure #1 **Cure #2	ASTM D-2240	Shore D	85 90
Flexural Strength *Cure #1 **Cure #2	ASTM D790	psi (MPa)	9,550 (66) 15,692 (108)
Flexural Modulus *Cure #1 **Cure #2	ASTM D790	psi (MPa)	528,286 (3,625) 425,751 (2,938)
Tensile Strength *Cure #1 **Cure #2	ASTM D638	psi (MPa)	5,254 (36) 8,703 (60)
Tensile Modulus *Cure #1 **Cure #2	ASTM D638	psi (MPa)	342,781 (2,365) 269,826 (1,862)
Tensile Elongation *Cure #1 **Cure #2	ASTM-D638	%	1.7 4.0

* Cure #1 - 7 day/R.T.

** Cure #2 – R.T. + 4 hr/212°F (100°C)

HANDLING PRECAUTIONS

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

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheets.

STORAGE CONDITIONS

- This product has a shelf life of 24 months for the resin and hardener as indicated by the expiration date on the container when stored in original unopened containers.

PACKAGING

Packaging information on request, please contact your local sales representative or find your local contact on www.sikaadvancedresins.us

LEGAL NOTICE

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