



BUILDING TRUST



# EPOLAM 2015

Technical Data Sheet

LAMINATING SYSTEM

Lloyd's Approved, 550 Cps Mixed Viscosities

## 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
- Low mixed viscosity/ Good wet out
- Good mechanical properties

### PHYSICAL PROPERTIES

Property	Test Method	Unit(s)	ProInfusion Resin	ProInfusion Hardener	Mixed System
Mix ratio – by weight					100/32
Mix ratio – by volume					100/38
Aspect			Liquid	Liquid	Liquid
Color		Visual	Clear	Clear	Clear-Lt. Amber
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)	
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 15 °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.

<b>Neat Cured Properties Tested at 74°F (23°C)</b>			
	<b>Test Method</b>	<b>Unit(s)</b>	<b>Test Results</b>
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)

<b>Composite Cured Properties Tested at 74°F (23°C)</b>			
	<b>Test Method</b>	<b>Unit(s)</b>	<b>Test Results</b>
Flexural Strength *Cure #1 **Cure #2	ASTM D790	psi (MPa)	33,897 (234) 40,117 (277)
Flexural Modulus *Cure #1 **Cure #2	ASTM D790	psi (MPa)	2.11M (14,559) 2.10M (14,490)
Tensile Strength *Cure #1 **Cure #2	ASTM D638	psi (MPa)	35,278 (243) 33,131 (229)
Tensile Modulus *Cure #1 **Cure #2	ASTM D638	psi (MPa)	893,345 (6,164) 910,021 (6,279)
Tensile Elongation *Cure #1 **Cure #2	ASTM D638	%	6.4 5.5

Vacuum bag laminate – 8 layer, 10 oz. glass, 0-90° rotation / Resin wt. content 36%

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

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



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## 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.

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