

DESCRIPTION

EPOLAM 2031 Resin mixed with EPOLAM 2031 or 2032 Hardener allows the production of composite moulds and structures by infusion method.

PROPERTIES

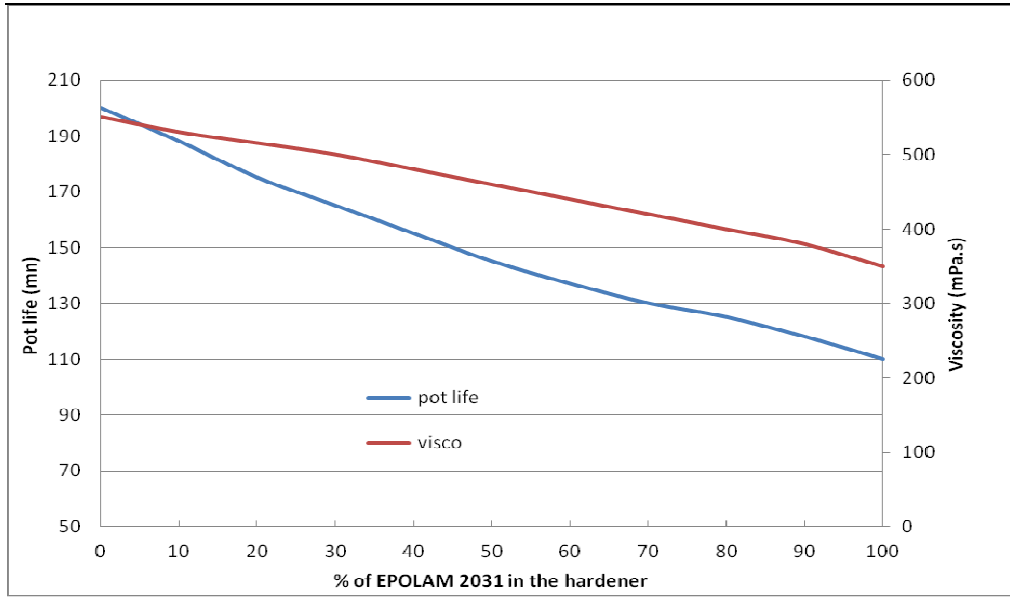
- High thermal resistance
- Good chemical resistance
- Excellent impregnation of fabrics

PHYSICAL PROPERTIES				
Composition		EPOLAM 2031 RESIN	EPOLAM 2031 HARDENER	EPOLAM 2032 HARDENER
Mix ratio by weight		100	26	26
Mix ratio by volume at 25 °C		100	33	33
Aspect		liquid	liquid	liquid
Colour		light amber	colourless	amber
Viscosity at 25 °C (mPa.s)		1,300	16	50
Viscosity of mixing	BROOKFIELD LVT		350	550
Specific gravity at 25 °C (g/cm ³)	ISO 1675 : 1985	1.16	0.92	0.92
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	1.12	1.12
Pot life at 25 °C on 500 g (min)	Gel Timer TECAM		110	200

MECHANICAL PROPERTIES at 23 °C (1)				
			EPOLAM 2031/2031	EPOLAM 2031/3032
Hardness	ISO 868 : 2003	Shore D15	88	88
Tensile modulus	ISO 527 : 1993	MPa	3,600	3,700
Tensile strength	ISO 527 : 1993	MPa	80	70
Elongation at break	ISO 527 : 1993	%	6	4
Flexural modulus	ISO 178 : 2010	MPa	2,900	3,000
Flexural strength	ISO 178 : 2010	MPa	130	125
THERMAL AND SPECIFIC PROPERTIES (1)				
Glass transition temperature (T _g) 16 hours at 100 °C 16 hours at 140 °C	ISO 11357-2 : 1999	°C	120 138	120 145
Coefficient of thermal expansion (CTE) (+30 °C to +110 °C)	ISO 11359-2 : 1999	10 ⁻⁶ K ⁻¹	80	80

(1) Average values obtained on standardized specimens / Hardening 16 h at room temperature + 12 h at 50 °C + 16h at 100 °C

Pot life and viscosity of EPOLAM 2031 system mixing
EPOLAM 2031 and 2032 hardeners

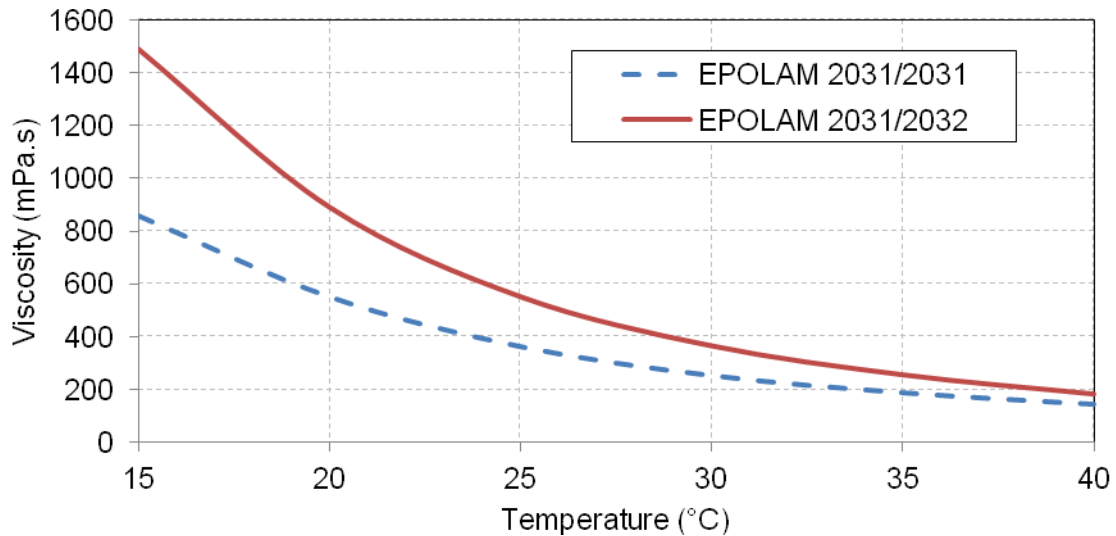


MIXING VISCOSITY VS TEMPERATURE

RHEOMETER CVO 100 Malvern

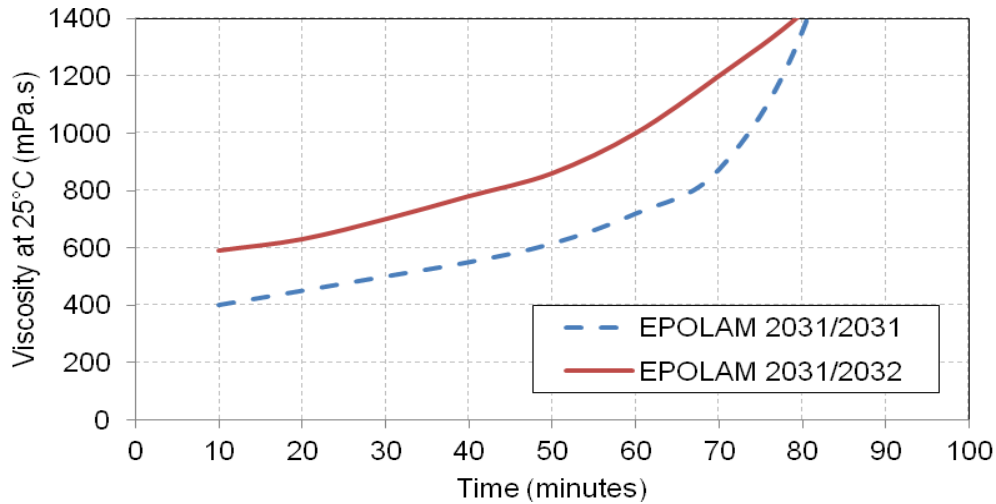
Cone – Plate 4° / 40 mm

Shear rate : 30 s⁻¹



MIXING VISCOSITY VS TIME AT 25 °C

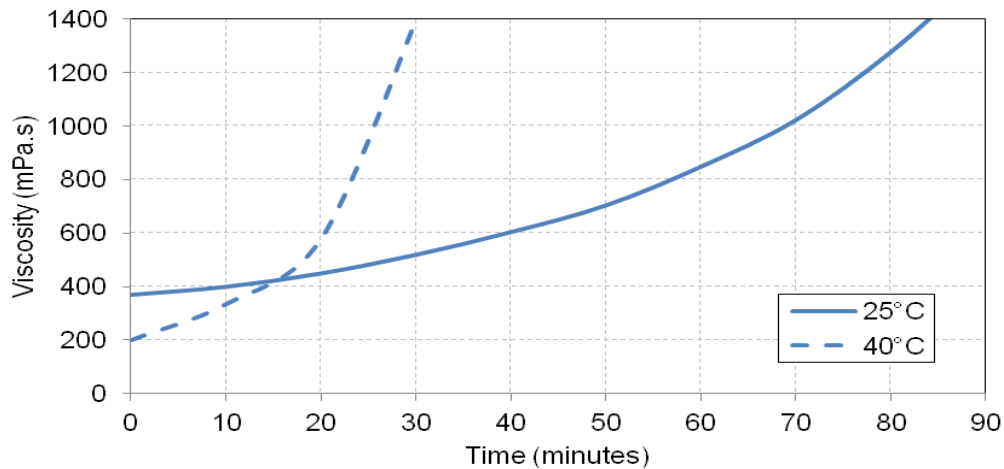
Quantity of mixing : 500 g
 RHEOMETER CVO 100 Malvern
 Plate – Plate 25 mm
 Shear rate : 30 s⁻¹



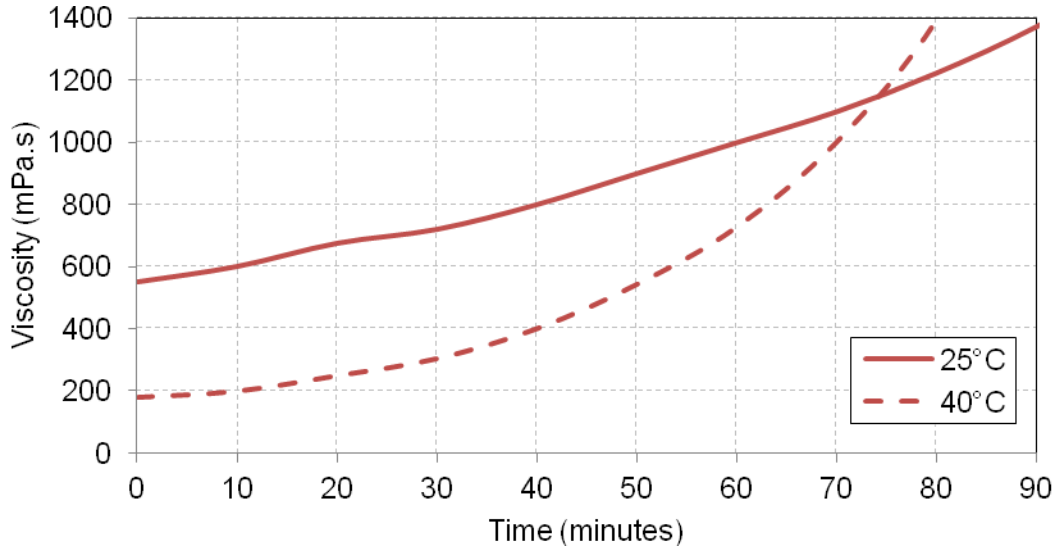
MIXING VISCOSITY VS TIME ON THIN LAYER

thickness : 0.5 mm
 RHEOMETER CVO 100 Malvern
 Plate – Plate 25 mm
 Shear rate : 30 s⁻¹

EPOLAM 2031 / 2031



EPOLAM 2031 / 2032

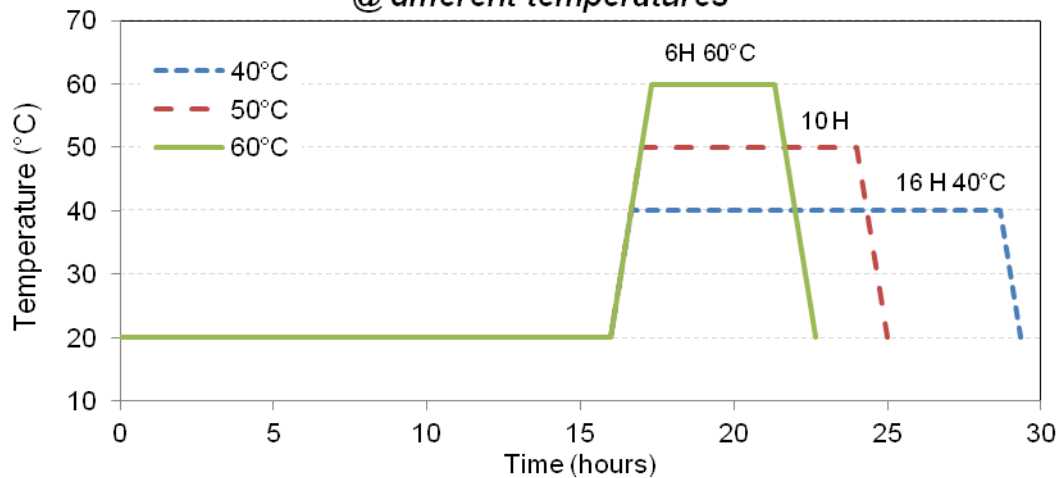


PROCESSING CONDITIONS

After mixing according to the indicated ratio impregnate the fiber reinforcement and apply curing cycles.

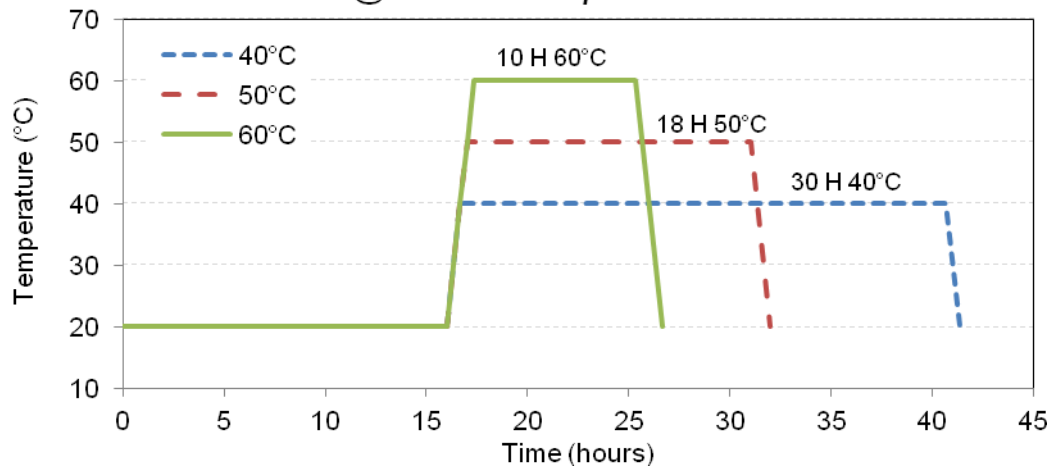
EPOLAM 2031 / 2031

PRE-CURING CYCLE BEFORE DEMOULDING
@ different temperatures



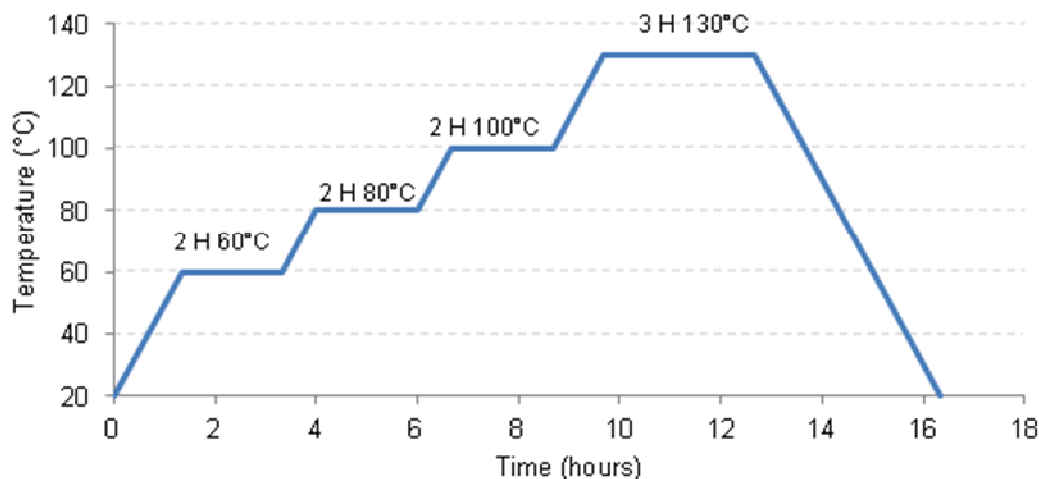
EPOLAM 2031 / 2032

PRE-CURING CYCLE BEFORE DEMOULDING
@ different temperatures



EPOLAM 2031/2031 & EPOLAM 2031/2032

POST CURE CYCLE



Please respect for each cycle an increase and a decrease in temperature of 30°C per hour between stages.

For any further information concerning the Resin Laminating Method and peripheral products provided by Axson, Please contact our Technical Support Department.

HANDLING PRECAUTIONS

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

- Ensure good ventilation
- Wear gloves, safety glasses and waterproof clothes

For further information, please consult the product safety data sheet.

STORAGE CONDITIONS

In case of resin crystallization during storage, heat between 40 to 50 °C to go back to liquid aspect.

Shelf life of both parts is 24 months in a dry place and in their original unopened containers at a temperature between 15 and 25 °C

Any open must be tightly closed under dry nitrogen.

PACKAGING

EPOLAM 2031 RESIN	EPOLAM 2031 HARDENER	EPOLAM 2032 HARDENER
22.0 kg	5.75 kg	
210 kg	18.2 kg	18.2 kg
1,100 kg	180 kg	180 kg
	900 kg	900 kg

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications. .