

EPOLAM 2031 CN RESIN

EPOLAM 2031 CN – 2032 CN HARDENER

EPOXY LAMINATING SYSTEM

T_g: 130°C

APPLICATIONS

EPOLAM 2031 CN allows the production of composite moulds and structures by infusion methods.

PROPERTIES

- High thermal resistance
- Good chemical resistance
- Good wetting and infiltrating performance
- High thickness laminates
- Curing at RT
- Strong adhesion

PHYSICAL PROPERTIES

Composition		EPOLAM 2031 CN RESIN	EPOLAM 2031 CN HARDENED	EPOLAM 2032 CN HARDENER
Aspect		liquid	liquid	liquid
Colour		light amber	colourless	light amber
Viscosity at 25°C (mPa.s) Mixing viscosity	BROOKFIELD LVT	1300 -	16 350	50 550
Density at 25°C (g/cm ³) Density of the cured product	ISO1675 :1985 ISO 2785 :1996	1.16 -	0.92 1.12	0.92 1.12
Mix ratio by weight at 25°C		100	26	26
Pot life(500g) at 25°C (min)	Gel Timer TECAM	-	100	200

MECHANICAL PROPERTIES AT 23°C⁽¹⁾

			EPOLAM 2031 / 2031 CN	EPOLAM 2031 / 2032 CN
Hardness	ISO 868 :2003	SHORE D15	88	88
Tensile modulus	ISO 178:1993	MPa	2900	3000
Tensile strength	ISO 178:1993	MPa	130	125
Tensile modulus	ISO 527:1993	MPa	3600	3700
Tensile strength	ISO 527:1993	MPa	80	70
Elongation at break	ISO 527:1993	%	6	4

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THERMAL AND OTHER PROPERTIES ⁽¹⁾				
			EPOLAM 2031 / 2031 CN	EPOLAM 2031 / 2032 CN
Glass transition temperature				
16 hours at 100°C	ISO 11359:2002	°C	120	120
16 hours at 140°C			138	145
Coefficient of thermal expansion (CTE)	ISO 11359:1999	10 ⁻⁶ .K ⁻¹	80	80
(+30°C, +110°C)				

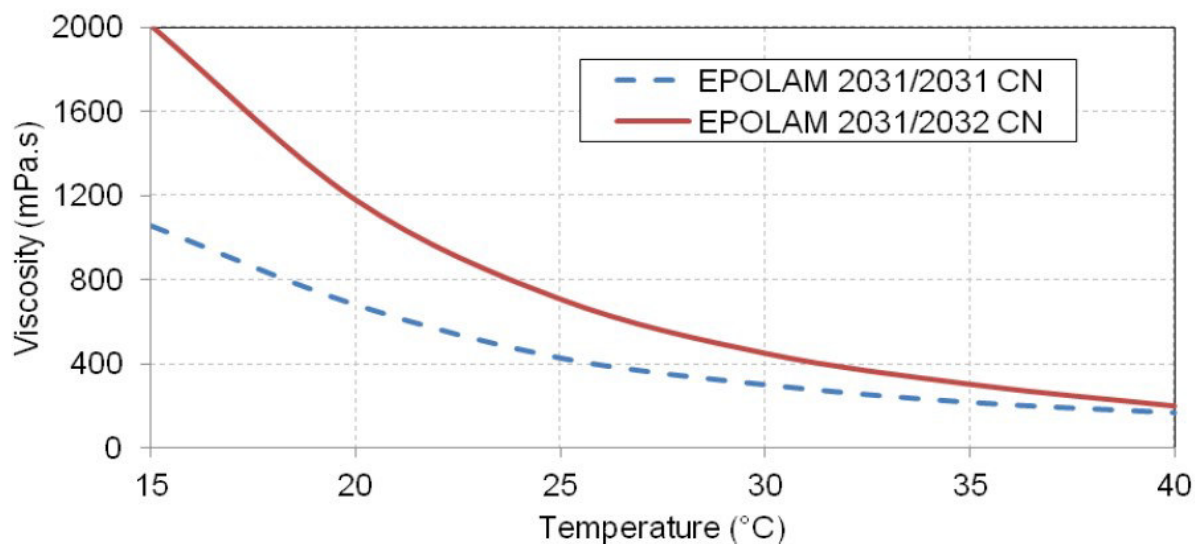
(1) Average values on the pure resin obtained on standard specimens / Hardening 16 h at room temperature + 12 h at 50°C + 16hr at 100°C

MIXING VISCOSITY VS TEMPERATURE

RHEOMETER CVO 100 Malvern

Cone – Plate 4° / 40 mm

Shear rate : 30 s⁻¹



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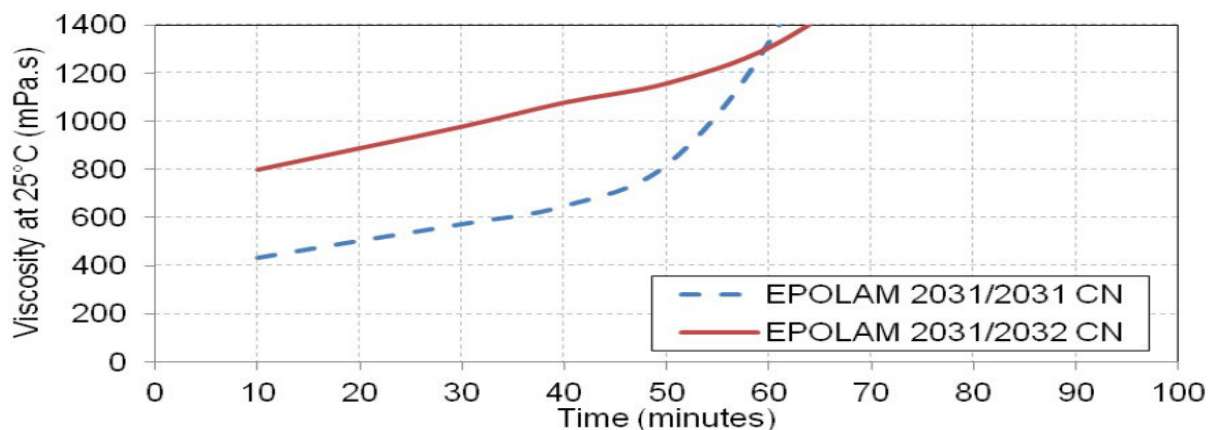
MIXING VISCOSITY VS TIME AT 25°C

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

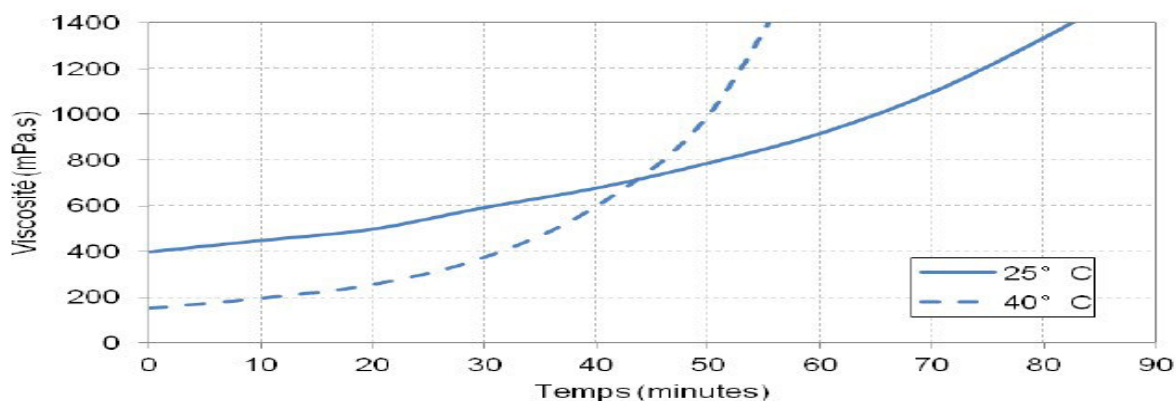
thickness : 0.5 mm

RHEOMETER CVO 100 Malvern

Plate – Plate 25 mm

Shear rate : 30 s⁻¹

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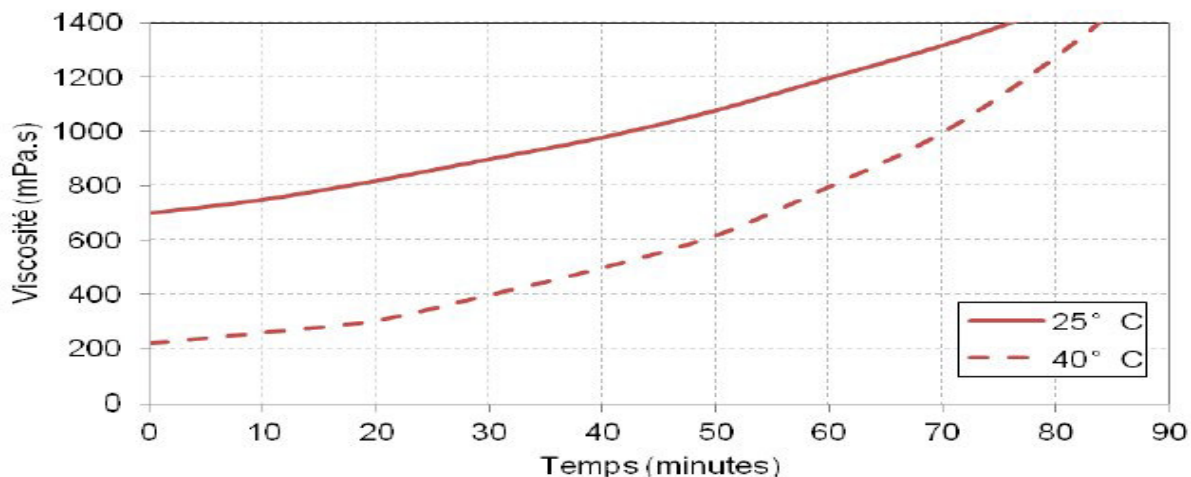
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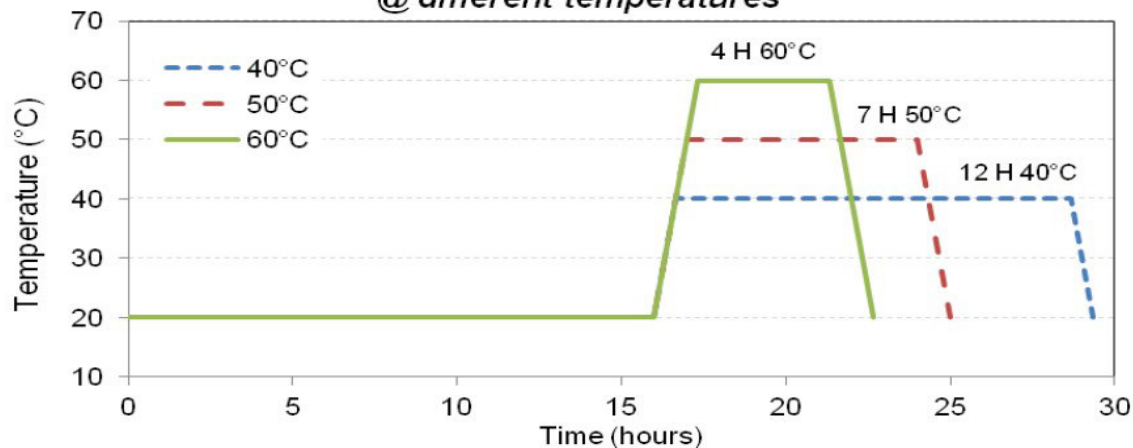


PROCESSING CONDITIONS

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

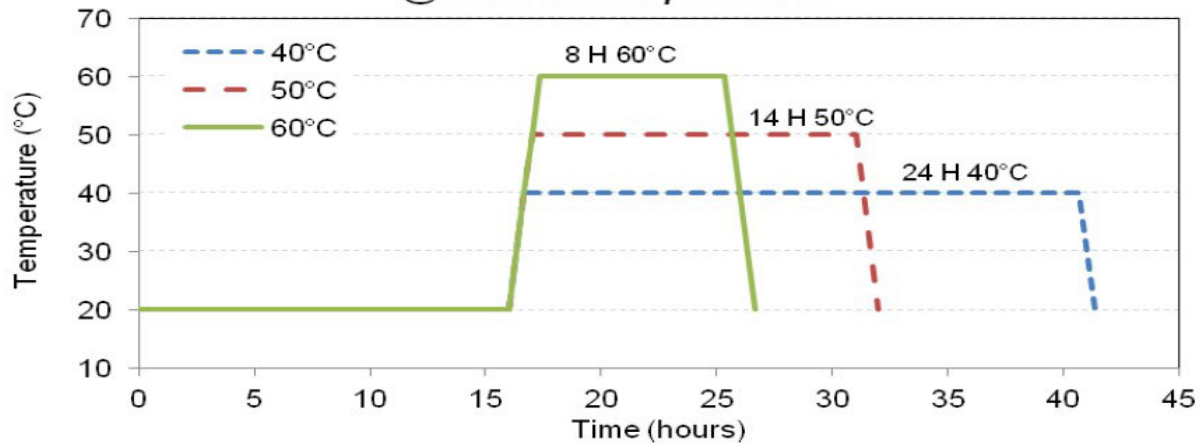
EPOLAM 2031 / 2031

PRE-CURING CYCLE BEFORE DEMOULDING @ different temperatures



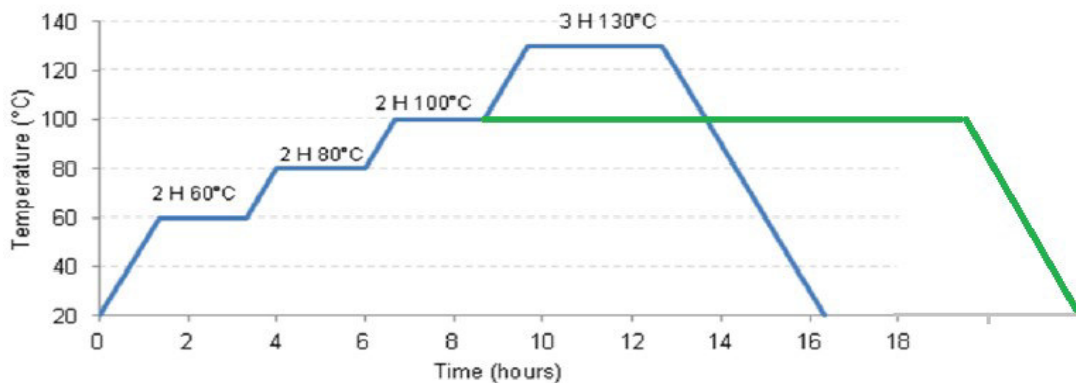
EPOLAM 2031 / 2032

PRE-CURING CYCLE BEFORE DEMOULDING @ different temperatures



EPOLAM 2031/2031 CN & EPOLAM 2031/2032 CN

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 , please contact our Technical Support Department.



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PRECAUTIONS

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

- Ensure good ventilation,
- Wear gloves and safety glasses

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

STORAGE

Use within 24 months of the manufacturing date. Expiry date indicated on the packaging.

PACKAGE

EPOLAM 2031 CN RESIN	EPOLAM 2031 CN HARDENER	EPOLAM 2032 CN HARDENER
1000KG	180KG	180KG
210KG	18.2KG	18.2KG
22KG	5.75KG	

GUARANTEE

The information of our technical data sheet are based on our present knowledge and the result of tests conducted under precise conditions. It is the responsibility of the user to determine the suitability of **Sika Advanced Resins** products, under their own conditions before commencing with the proposed application. **Sika Advanced Resins** refuse any guarantee about the compatibility of a product with any particular application. **Sika Advanced Resins** disclaim all responsibility for damage from any incident which results from the use of these products. The guarantee conditions are regulated by our general sale conditions.