

DESCRIPTION

- Realization of composite structures by infusion method: nautism, wind, general industries.
- Injection under vacuum and low pressure
- **Germanischer Lloyd (GL)** approved for EPOLAM 2042 and 2047 hardeners

PROPERTIES

- Very low viscosity
- Very good anchorage of reinforcements
- Good behaviour in humid environment
- Good impregnation of wood
- Good sticking of reinforcements impregnated on sandwich core

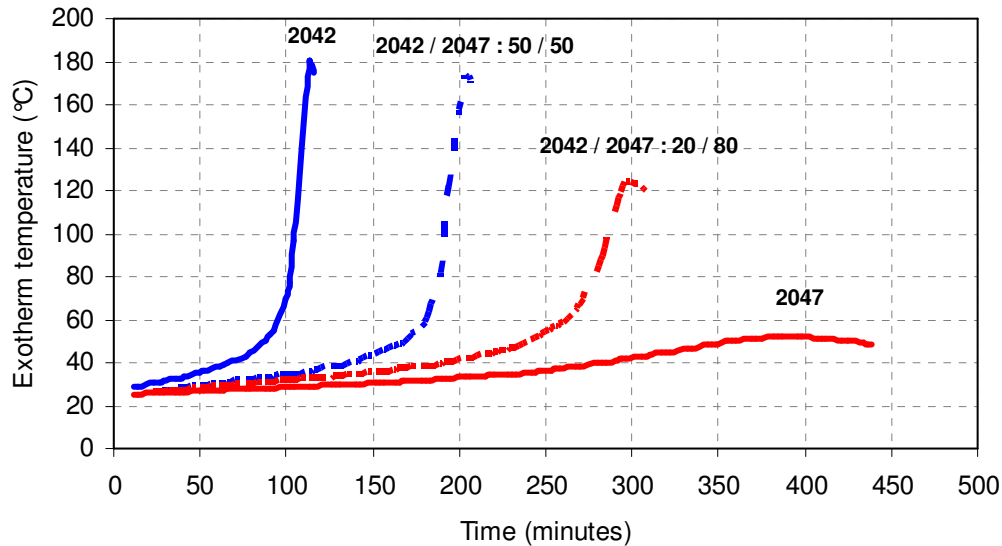
PHYSICAL PROPERTIES					
Composition		EPOLAM 2040 RESIN	EPOLAM 2017 HARDENER	EPOLAM 2042 HARDENER	EPOLAM 2047 HARDENER
Mix ratio by weight		100	30	32	32
Mix ration by volume à 25 °C		100	37	39	39
Aspect		liquid	liquid	liquid	liquid
Color		Light amber	Light amber	Light amber	Light amber
Viscosity à 25 °C (mPa.s)	BROOKFIELD LVT	1300	20	15	10
Mix viscosity at 25 °C			290	280	220
Density at 25 °C (g/cm ³)	ISO 1675 : 1985	1,16	0.96	0,95	0,94
Mix density at 25 °C		-	1.10	1,10	1,10
Pot life at 25 °C on 500g (min)	-		35	75	180
Gel time on 100 ml at 25 °C (min)	ASTM D 2471 - 99		50	100	300

MECHANICAL AND THERMAL PROPERTIES at 23 °C (1)					
			EPOLAM 2040 / 2017	EPOLAM 2040 / 2042	EPOLAM 2040 / 2047
Tensile strength	ISO 527 : 1993	MPa	75	75	71
Elongation at break	ISO 527 : 1993	%	5.4	8,7	8,0
Flexural modulus	ISO 178 : 2010	MPa	3100	2900	2900
Flexural strength	ISO 178 : 2010	MPa	124	125	115
Temperature resistance	DSC mettler	°C	85	93	86

(1) Average values measured on standard test tub/Condition of reticulation: 24 hours at 23 °C + 16 hours at 70 °C.

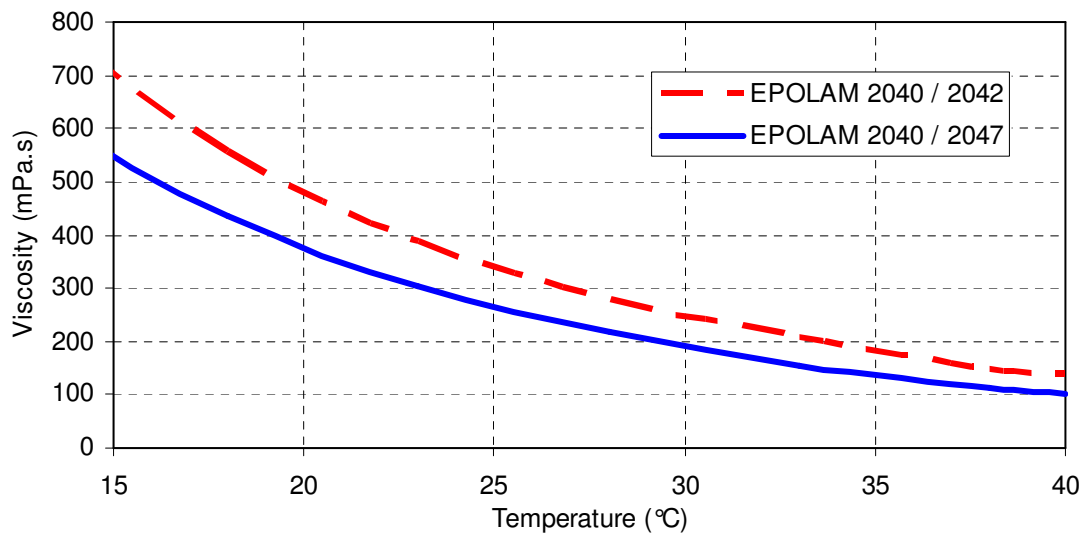
EXOTHERM VS TIME AT 23 °C

EPOLAM 2040 Résin + EPOLAM 20 .. Hardeners
Volume : 100 ml



MIXING VISCOSITY VS TEMPERATURE

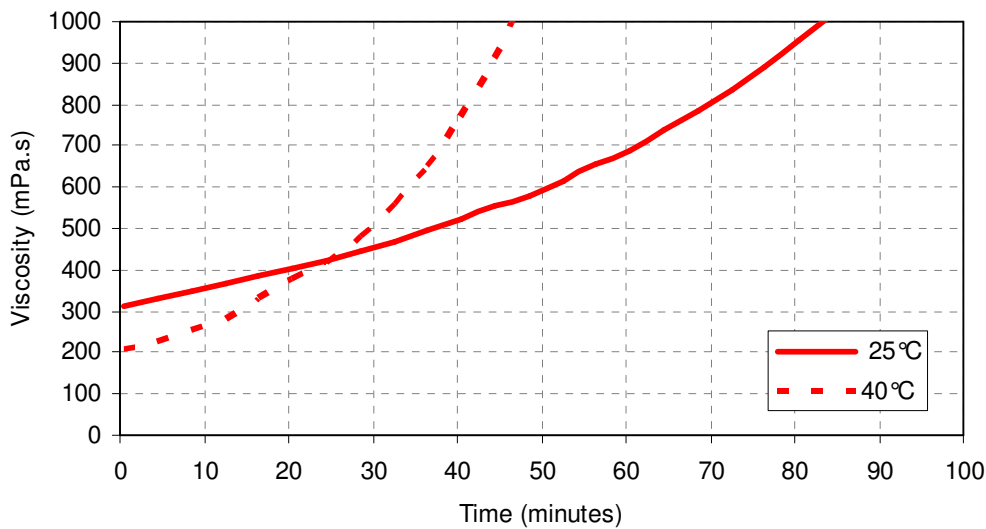
Rheometer CVO 100 Malvern
Cone – Plan 4° / 40 mm
Velocity gradient : 30 s⁻¹



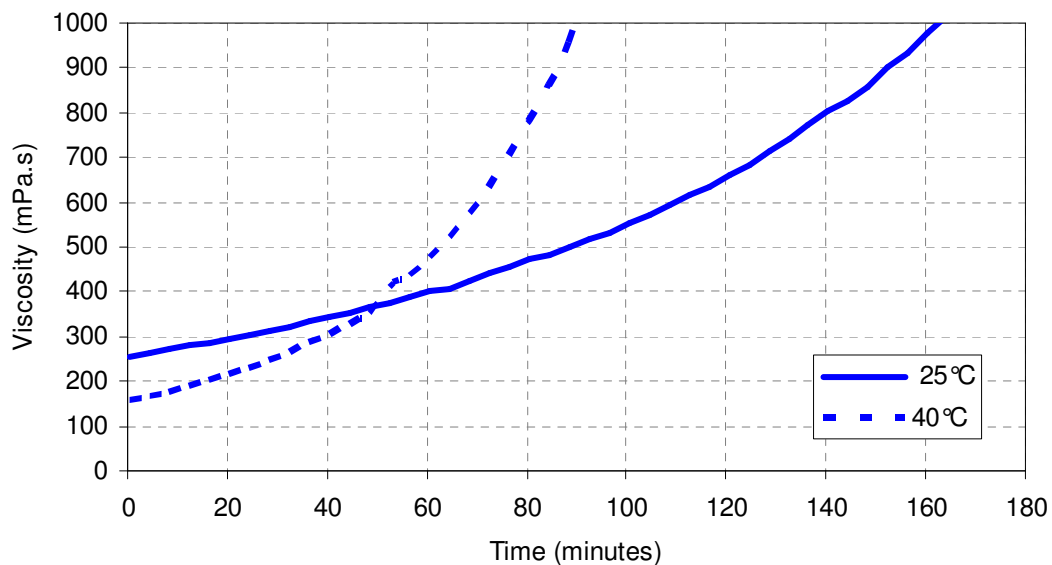
MIXING VISCOSITY VS TIME

Rheometer CVO 100 Malvern
Plan – Plan 25 mm
Gap : 0.5 mm
Velocity gradient : 30 s⁻¹

EPOLAM 2040 / 2042



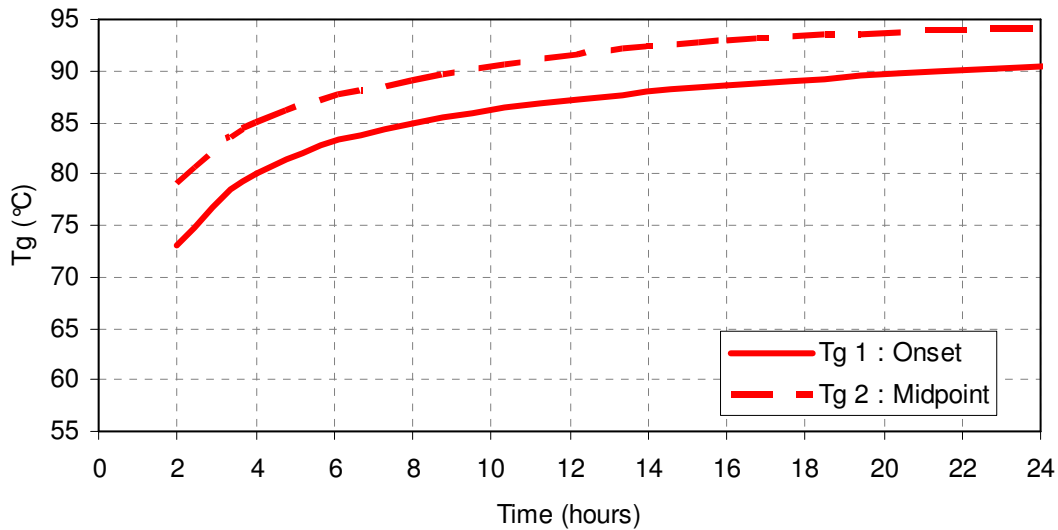
EPOLAM 2040 / 2047



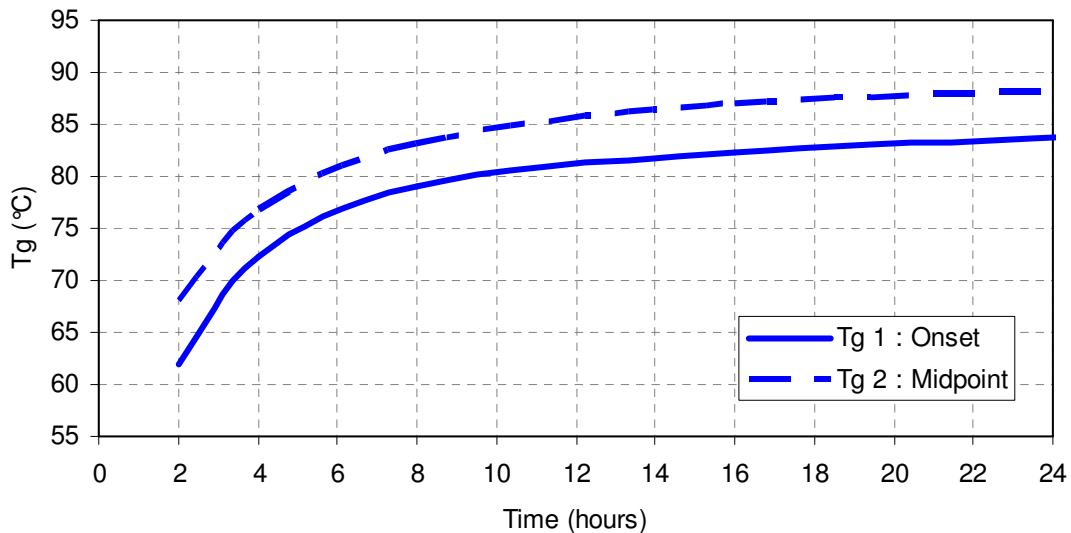
TG DSC VS TIME

Temperature : 70 °C

EPOLAM 2040 / 2042



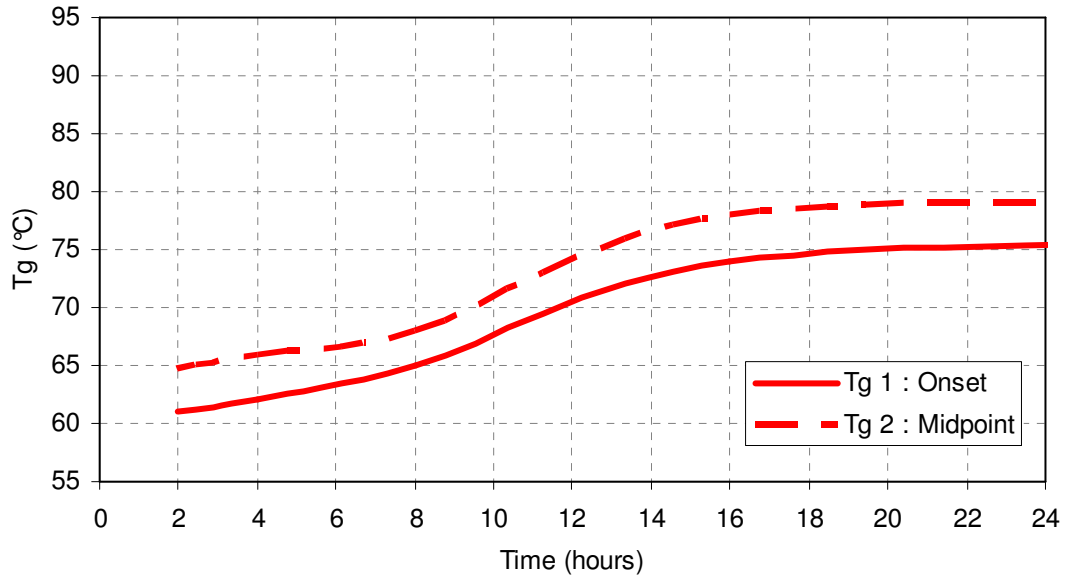
EPOLAM 2040 / 2047



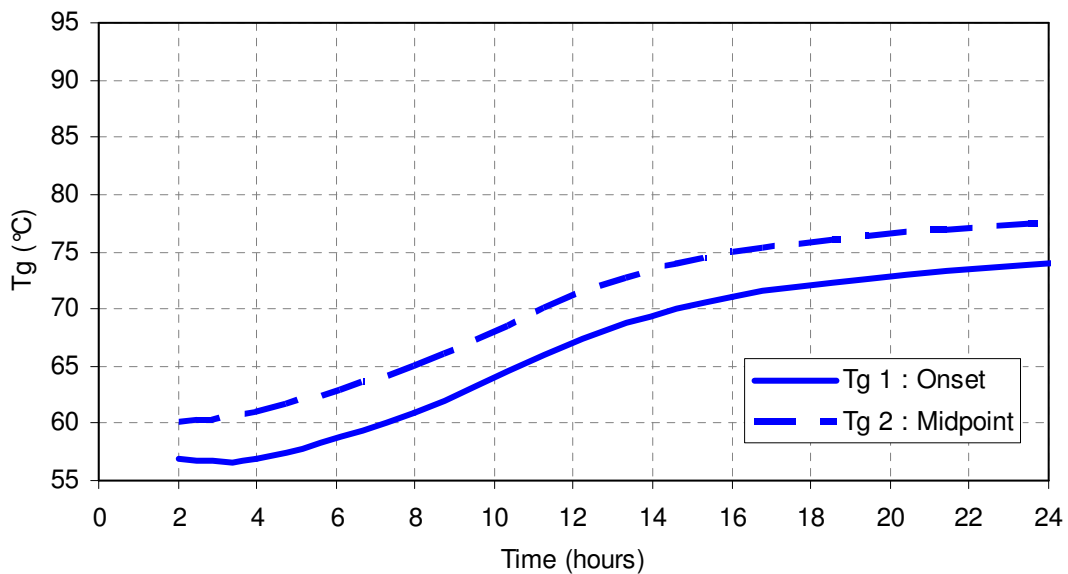
TG DSC VS TIME

Temperature : 50 °C

EPOLAM 2040 / 2042



EPOLAM 2040 / 2047



PROCESSING

After realizing a mixture in the ratio indicated, proceed with impregnation of reinforcements. To ensure an optimum impregnation, it is recommended to use packages stored at a temperature above 15 °C. Physical properties are guaranteed at room temperature between 18 °C and 25 °C. Out of this range of temperature, variations of viscosity and reactivity will be observed.

HANDLONG 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 product safety data sheet.

STORAGE CONDITIONS

Shelf life of **EPOLAM 2040-2042-2047 system is 24 months** in a dry place at a temperature between 15 °C and 25 °C in its unopened package.

Shelf life of **EPOLAM 2017 Hardener is 12 months**. Expiration date is indicated on package.

PACKAGING

EPOLAM 2040 RESIN	EPOLAM 2017 HARDENER	EPOLAM 2042 HARDENER	EPOLAM 2047 HARDENER
1100 kg	900 kg	900 kg	900 kg
220 kg	180 kg	180 kg	180 kg
22 kg	18 kg	17.6 kg	17.6 kg
	6 kg	7.05 kg	
	1,5 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