BUILDING TRUST

EPOLAM 2017 RESIN

EPOLAM 2013 - 2017 - 2018 HARDENER

LAMINATING EPOXY RESIN

Tg: 80℃

DESCRIPTION

Production of composite structures by wet lay-up method, infusion, vacuum and low pressure injection. Good behavior on wood impregnation and bonding.

PROPERTIES

- Good mechanical properties
- Low viscosity
- Compatible hardeners
- Good behavior in moist environnement

PHYSICAL PROPERTIES					
		RESIN EPOLAM 2017	HARDENER EPOLAM 2013	HARDENER EPOLAM 2017	HARDENER EPOLAM 2018
Mix ratio by weight Mix ratio by volume		100	30 36	30 35	30 35
Aspect		liquid	liquid	liquid	liquid
Colour		light amber	light amber	light amber	light amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	4000	25	20	10
Density at 25℃ (g/cm^3)	ISO 1675:1985	1.17	1.0	0.96	0.96
Mixed：					
Pot life at 25°C on 500g	-	min	8	35	160
Viscosity at 25℃ (mPa.s)	BROOKFIELD LVT		1400	700	400
Specific gravity at 23°C (g/cm^3)	ISO 2781 :1996		1.16	1.16	1.16
Gelation time at 23°C on laminate (5 plies / glass fabric 290 g/m^2)	LT 051 : 1998	min	35¬40	75	360
Demolding time at 23°C on laminate (5 plies / glass fabric 290 g/m^2)	-	hr	4 max	5¬6	24¬28

PROCESSING CONDITIONS

After mixing according to the indicated ratio, impregnate the reinforcements (glass, aramid, carbon). To obtain the desired temperature resistance and the optimal mechanical properties it is necessary to make a posttreatment of EPOLAM 2017 system. Post cure: 12 to 36 h RT + 2 hours at 45°C + 2 h at 60°C + 8 h at 80°C.

Working at 20°C minimum ensures a very good start of curing of EPOLAM 2017-2018 system.

Use of EPOLAM 2013 Hardener as an accelerator:

Example:

EPOLAM 2017 RESIN : 100 g

EPOLAM 2013 HARDENER : X g

EPOLAM 2017, EPOLAM 2018 : Y g with X + Y = 30

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MECHANICAL AND THERMAL PROPERTIES at 23°C (1)					
RESIN			EPOLAM 2017 RESIN		
HARDENERS			EPOLAM 2013 HARDENER	EPOLAM 2017 HARDENER	EPOLAM 2018 HARDENER
Flexural modulus	ISO 178 :2001	MPa	2800	3000	2750
Flexural strength	ISO 178 :2001	MPa	100	132	108
Tensile Modulus	ISO 527 :1993	MPa	3000	3700	3200
Elongation at break	ISO 527 :1993	%	3	5.6	6
Hardness	ISO 868 :2003	SHORE D	86	88	86
Glass transition temperature	ISO 11359 :2002	℃	70	89	83
Deflection temperature	ISO75:2004	℃	66	84	75

(1): Average values obtained on standard specimens of pure resin / Hardening 24 hr at 23°C + 16 hr at 70°C.

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
Shelf life of EPOLAM 2017 Resin is 24 months. Shelf life of EPOLAM 2013, EPOLAM 2017 and EPOLAM 2018 Hardeners is 12 months. Expiry date indicated on the packaging.

PACKAGING

EPOLAM 2017 RESIN	EPOLAM 2013 HARDENER	EPOLAM 2017 HARDENER	EPOLAM 2018 HARDENER
1 000 kg 200 kg 20kg 5kg	6.4kg 18kg	900kg 180kg 18kg 6kg 1.8kg	900kg 180kg 18kg 6kg 1.8kg

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 *Sika Advanced Resins* products, under their own conditions before commencing with the proposed application. *Sika Advanced Resins* guarantee the conformity of their products with their specifications but cannot guarantee 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 responsibility of *Sika Advanced Resins* is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.

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