

DESCRIPTION

Production of composite structures by wet lay-up method, infusion, vacuum and low pressure injection.

PROPERTIES

- *Good mechanical properties*
- *Low viscosity*
- *Compatible hardeners*
- *Approved by Lloyd's Register*

PHYSICAL PROPERTIES					
RESIN		EPOLAM 2017 RESIN	-	-	-
HARDENERS		-	EPOLAM 2017 HARDENER	EPOLAM 2017 – 2018 50/50 HARDENER	EPOLAM 2018 HARDENER
Mix ratio by weight		100	30	30	30
Aspect		liquid	liquid	liquid	liquid
Colour		light amber	light amber	light amber	light amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	2,850	25	20	10
Density at 25°C	ISO 1675 : 1985	1.17	0.96	0.96	0.96
Pot life at 25 °C on 500g	-	min.	35	70	160
Viscosity at 25°C	BROOKFIELD LVT	mPa.s	550	450	350
Specific gravity at 23 °C	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	hr	1hr20	2hr20	6
Demolding time at 23°C on laminate (5 plies / glass fabric 290 g/m ²)	-	hr	5-6	16-18	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 post-treatment 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.

MECHANICAL AND THERMAL PROPERTIES at 23 °C (1)

RESIN			EPOLAM 2017 RESIN		
			EPOLAM 2017 HARDENER	EPOLAM 2017 – 2018 50/50 HARDENER	EPOLAM 2018 HARDENER
HARDENERS					
Flexural modulus	ISO 178 : 2001	MPa	3,000	2,900	2,750
Flexural strength	ISO 178 :2001	MPa	132	120	108
Tensile modulus	ISO 527 : 1993	MPa	3,700	3,600	3,200
Tensile strength	ISO 527 : 1993	MPa	73	70	68
Elongation at break	ISO 527 : 1993	%	5.6	5.8	6
Hardness	ISO 868 : 2003	Shore D15	88	86	86
Glass transition temperature	ISO 11359 : 2002	°C	89	86	83
Deflection temperature	ISO 75 : 2004	°C	84	80	75

(1): Average values obtained on standard specimens of pure resin / Hardening 24 hr at 23 °C + 16 hr at 80 °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 2017 and EPOLAM 2018 Hardeners is 12 months. Expiry date indicated on the packaging.

PACKAGING

EPOLAM 2017 RESIN	EPOLAM 2017 HARDENER	EPOLAM 2018 HARDENER
1.000 kg	900 kg	900 kg
200 kg	180 kg	180 kg
20 kg	18 kg	18 kg
5 kg	6 kg	6 kg
	1.5 kg	1.5 kg

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 AXSON products, under their own conditions before commencing with the proposed application. AXSON refuse any guarantee about 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 guarantee conditions are regulated by our general sale conditions.