

EPOLAM 2017 RESIN

Biresin® CH125-1 – EPOLAM 2017 - 2018 HARDENERS LAMINATING EPOXY RESIN

Tg 80°C

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 environment

PHYSICAL PROPERTIES					
RESIN		EPOLAM 2017 RESIN	-	-	-
HARDENERS		-	Biresin® CH125-1 Fast HARDENER	EPOLAM 2017 Standard HARDENER	EPOLAM 2018 Slow HARDENER
Mix ratio by weight		100	25	30	30
Mix ratio by volume			29	35	35
Aspect		liquid	liquid	liquid	liquid
Colour		light amber	light amber	light amber	light amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	2,850	10	20	10
Density at 25°C (g/cm³)	ISO 1675 : 1985	1.17	1.0	0.96	0.96

Pot life at 25°C on 500g	-	min.	15	35	160
Viscosity at 25°C	BROOKFIELD LVT	mPa.s	380	550	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/m²)	LT 051 : 1998	hr	1	1hr20	6
Demolding time at 23°C on laminate (5 plies / glass fabric 290 g/m²)	-	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 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.
 For intermediate hardening time and pot life, please refer to annex 1: page 3

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MECHANICAL AND THERMAL PROPERTIES at 23°C (1)

RESIN			EPOLAM 2017 RESIN		
			Biresin® CH125-1 HARDENER	EPOLAM 2017 HARDENER	EPOLAM 2018 HARDENER
Flexural modulus	ISO 178 : 2001	MPa	2,400	3,000	2,750
Flexural strength	ISO 178 :2001	MPa	100	132	108
Tensile Modulus	ISO 527 : 1993	MPa	2,500	3,700	3,200
Tensile strength	ISO 527 : 1993	MPa	70	73	68
Elongation at break	ISO 527 : 1993	%	8	5.6	6
Hardness	ISO 868 : 2003	Shore D15	87	88	86
Glass transition temperature	ISO 11359 : 2002	°C	110	89	83
Deflection temperature	ISO 75 : 2004	°C	92	84	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 Biresin® CH125-1, EPOLAM 2017 and EPOLAM 2018 Hardeners is 12 months. Expiry date indicated on the packaging.

PACKAGING

EPOLAM 2017 RESIN	Biresin® CH125-1 HARDENER	EPOLAM 2017 HARDENER	EPOLAM 2018 HARDENER
1.000 kg	940 kg		180 kg
200 kg	180 kg	18 kg	18 kg
20 kg	25 kg	6 kg	6 kg
5 kg	3 kg	1.5 kg	1.5 kg

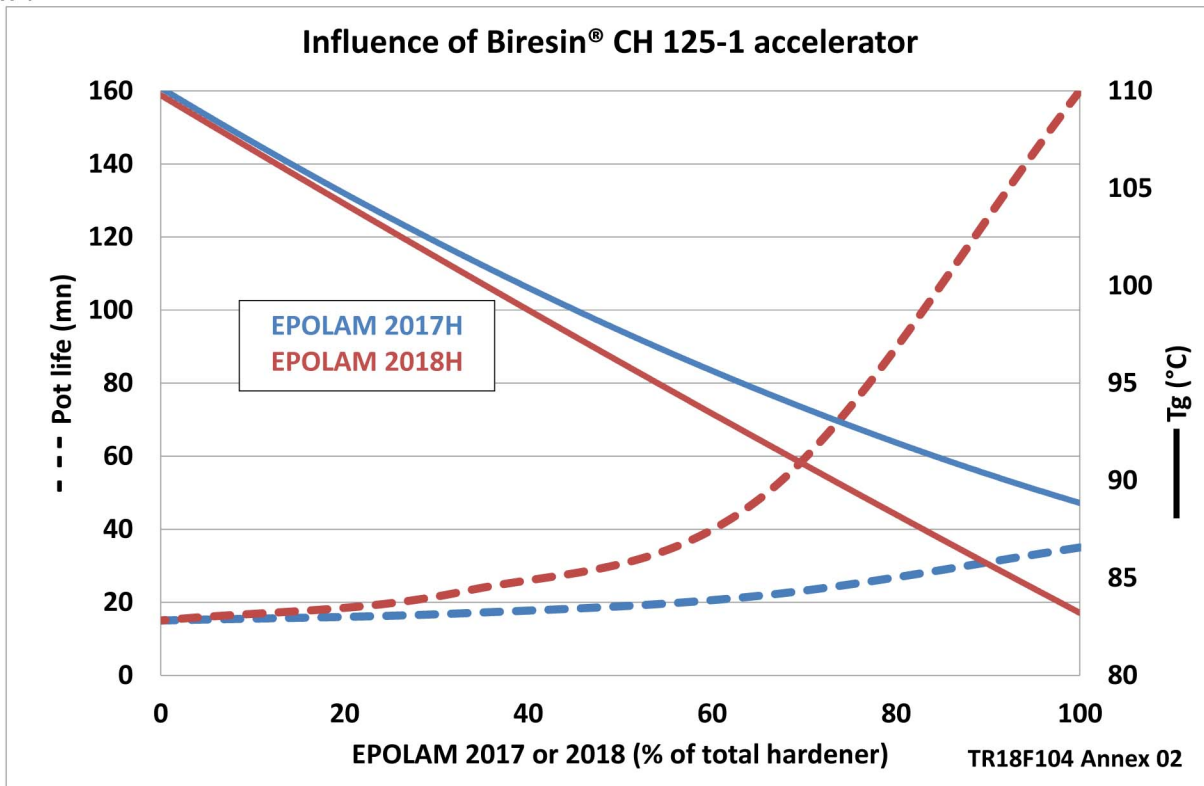
GUARANTEE

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Annex 1



Example: Mixing of hardeners for 100 grams of resin.

Hardener Biresin® CH125-1	25	20	15	10	5	0
Hardener EPOLAM 2017	0	6	12	18	24	30
Hardener EPOLAM 2018	0	6	12	18	24	30