

DESCRIPTION

The epoxy system, which is made up of a resin and three hardeners compatible between them, is designed for the production of tools by impregnation.

The system can be used as a gel coat, casting or concrete if fillers are added.

PROPERTIES

- Variable reactivity
- Easy use
- Good wetting of reinforcements or fillers
- No foam
- Low modulus
- Compatible hardeners (see remarks)

PHYSICAL PROPERTIES

Composition		EPOLAM 2010 RESIN	EPOLAM 2010 HARDENER	EPOLAM 2011 HARDENER	EPOLAM 2012 HARDENER
Mix ratio by weight		100	50	50	50
Mix ratio by volume at 25 °C		100	59	59	59
Aspect		thick liquid	liquid	liquid	liquid
Colour		light amber	light amber	light amber	light amber
Viscosity at 25 °C (mPa.s)	BROOKFIELD	14,000	70	60	50
Viscosity of mixing	LVT	-	1,000	900	800
Specific gravity at 25 °C	ISO 1675 : 1985	1.16	0.98	0.98	0.98
Pot life at 25 °C on 450 g (min)	Gel Timer TECAM	-	30 - 35	60 - 70	120 - 150

REMARKS

Depending on the reactivity desired, the amount of mixed hardeners must be calculated on the following ratio :
100/50

$$1,000 \text{ g RESIN} + X \text{ g HARDENER \# 1} + Y \text{ g HARDENER \# 2} = 1,500 \text{ g with } X + Y = 500 \text{ g}$$

PROCESSING

Prepare a homogeneous mix according to the indicated ratio.

In case of gel coat: after mixing RESIN and EPOLAM 2010 HARDENER, add the fillers to obtain a gel. Apply with a brush on a mould prepared (polished wax).

In case of laminate: the hardener is to adapt according to the dimension and the complexity of the application in order to use ideally the resin.

In case of concrete: after mixing resin with hardeners (EPOLAM 2011, EPOLAM 2012) add fillers (aluminium, sand or others) as follows:

- Alluminium concrete: 100 to 120 g (RESIN + HARDENER) + 500 g RZ 1019 + 500 g RZ 1021
- Sand concrete: 100 to 120 g (RESIN + HARDENER) + 500 g sand F1 + 500 g sand G2

PHYSICAL PROPERTIES						
Mixed	RESIN			EPOLAM 2010		
	HARDENER			EPOLAM 2010	EPOLAM 2011	EPOLAM 2012
Hardness		ISO 868 : 2003	Shore D	83	83	83
Tensile strength		ISO 527 / 1993	MPa	65	55	50
Compressive strength at yield		ISO 604 : 2002	MPa	85	75	70
Flexural strength		ISO 178 : 2001	MPa	100	90	90
Flexural modulus		ISO 178 : 2001	MPa	3,000	2,700	2,500

(1) : Average values obtained on standard specimens / Hardening 15 hr at 40 °C

THERMAL AND SPECIFIC PROPERTIES						
Mixed	RESIN			EPOLAM 2010		
	HARDENER			EPOLAM 2010	EPOLAM 2011	EPOLAM 2012
Glass transition temperature		ISO 11359 : 2002	°C	50	50	55
Maximal laminating thickness		-	mm	8	10 - 12	15 - 20
Demoulding time at RT		-	hr	16	24	36
Final hardening at RT		-	d	3	5	7

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 is 24 months in a dry place and in original unopened containers at a temperature between 15 and 25 °C.

PACKAGING

RESINE EPOLAM 2010	HARDENER EPOLAM 2010	HARDENER EPOLAM 2011	HARDENER EPOLAM 2012
1 x 20.0 kg 1 x 50.0 kg 1 x 220.0 kg	1 x 5.0 kg 1 x 50.0 kg 1 x 200.0 kg	1 x 5.0 kg 1 x 50.0 kg 1 x 200.0 kg	1 x 5.0 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.