

DESCRIPTION

Production of tooling for sheet metal forming, foundry patterns, copy patterns, core boxes, stamping tools for the industry.

PROPERTIES

- Good sliding coefficient
- Low mixing viscosity
- Reactivity and casting thickness according to the hardener choice
- Possibility to mix hardeners between them to obtain the best compromise between the casting thickness and the demoulding time

PHYSICAL PROPERTIES					
Composition		RESIN EPO 5010	HARDENER EPOLAM 2010	HARDENER EPOLAM 2011	HARDENER EPOLAM 2012
Mix ratio by weight		100	15	15	15
Mix ratio by volume at 25°C		100	40	40	40
Aspect		viscous	liquid	liquid	liquid
Colour		black	light amber	light amber	light amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	200.000	70	60	50
Specific gravity before mixing at 25°C	ISO 1675 : 1985	2,59	0,98	0,98	0,98

Brookfield viscosity at 25°C (mPa.s)	5.750	5.750	5.750
Specific gravity at 25°C	2,20	2,20	2,20
Pot-life (700 g) at 25°C (min)	55 - 65	110 - 130	180 - 225

MECHANICAL PROPERTIES AT 23°C (1)					
Resin EPO 5010/Hardener mixing			2010	2011	2012
Hardness	ISO 868 :2003	Shore D	86	86	86
Flexural modulus	ISO 178 :2001	MPa	6.500	6.000	6.000
Flexural strength	ISO 178 :2001	MPa	75	75	75
Compressive strength	ISO 604 :2002	MPa	90	85	80

(1) The values are obtained on standard specimens after curing for 15 hours at 40°

PROCESSING

The packaging of the resin allows to add directly the hardener and to mix without decanting and weighing.
For a 16.7 kg packaging mix with a mixer type « JIFFY D 65 » and add progressively the contents of a hardener tin. Mix until a homogeneous mix is obtained. Then cast.
For a 1.5 kg packaging of resin add 225 g of hardener with the measure. Then mix thoroughly the both parts.

THERMAL AND SPECIFIC PROPERTIES (1)

Resin EPO 5010/Hardener mixing		2010	2011	2012
Glass transition temperature (Tg)	°C	50	50	55
Maximal casting thickness	mm	10	30	70
Linear shrinkage of the maximal thickness	mm/m	0,1	1	0,7
Demoulding time at room temperature at the maximal thickness	hr	10 - 12	12 - 16	24 - 36
Complete hardening time at room temperature	d	3	5	7

(1) The values are obtained on standard specimens after curing for 15 hours at 40°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 is 12 months in a dry place and in original unopened containers at a temperature between 15 and 25° C. Any open can must be tightly closed under dry nitrogen blanket.

PACKAGING

RESIN EPO 5010 1 x 16,7 kg	HARDENER EPOLAM 2010/2011/2012 1 x 2,5 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.