

DESCRIPTION

Production of tooling by laminating. Used in concrete or in casting by addition of fillers.

PROPERTIES

- Product free of MDA
- Good thermal resistance
- Good wetting of fabrics and fillers
- Good resistance in a vertically side
- Low exothermy
- Low shrinkage
- Easier curing cycle

PHYSICAL PROPERTIES				
Composition		RESIN	HARDENER	MIXED
Mix ratio by weight		100	32	
Mix ratio by volume at 25 °C		100	40	
Aspect		liquid	liquid	liquid
Colour		clear green	amber	clear green
Viscosity at 25 °C (mPa.s)	BROOKFIELD LVT	4,300	80	2,000
Specific gravity at 25 °C	ISO 1675 : 1985	1.19	0.96	-
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	-	1.12
Pot life at 25 °C on 500 g (min)	Gel Timer TECAM			70 - 90

MECHANICAL PROPERTIES at 23 °C (1)			
Flexural modulus	ISO 178 :2001	MPa	3,300
Flexural strength	ISO 178 :2001	MPa	105
Tensile strength	ISO 527 :1993	MPa	45
Compressive strength	ISO 604 :2002	MPa	110
Final hardness	ISO 868 :2003	Shore D	87
Glass temperature transition	ISO 11359 : 2002	°C	125
Demoulding time at room temperature		hr	24 - 36
Complete hardening time at room temperature		d	5

(1) : Average values obtained on standard specimens after 15 hours at 120 °C curing

PROCESSING CONDITIONS

LAMINATING: After mixing according to the indicated ratio, impregnate the reinforcements by the different laminating processes. Demould after 24 hours polymerisation at room temperature. Then cure (see § thermal treatment).

CONCRETE: In order to produce an aluminium concrete, use 120 g to 150 g of EPOLAM 2050 mix for 500 g of RZ 1019 granulate + 500 g of RZ 1020 granulate. Mix the whole together with a planetary agitator and tamp down the concrete on to the laminate

THERMAL TREATMENT

A good rate of polymerisation is obtained at room temperature. A curing is not necessary when using a tooling at a temperature under 50 °C.

On the other hand a thermal treatment is necessary for applications requiring a good thermal resistance until 125 °C. This is the reason why the tooling or the part must be cured for 8 to 12 hours at a temperature lower of 20 to 30 °C from its working temperature. Then the processing of the tooling will allow to finish the thermal treatment.

Caution: When curing tooling of high dimension it is necessary to use suitable supports in order to avoid any risk of distortion. Laminating thickness must not exceed 12 mm in only one operation.

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 for both parts in a dry place and in original unopened containers at a temperature between 15 and 25 °C. Any open must be tightly closed under dry nitrogen blanket.

PACKAGING

RESIN	HARDENER
1 x 20 kg 1 x 50 kg	1 x 6,40 kg 1 x 16 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.