

DESCRIPTION

Production of thermoforming moulds and moulds for prepreg requiring a 195°C temperature resistance

PROPERTIES

- Good temperature resistance
- High reproduction accuracy
- Good coefficient of thermal curing
- Long pot life
- Good surface aspect after machining

PHYSICAL PROPERTIES				
Composition		RESIN EPO 752	HARDENER EPOLAM 2080	MIXING
Mix ratio by weight		100	16	
Mix ratio by volume at 25°C		100	29	
Aspect		liquid	liquid	liquid
Colour		grey	dark amber	grey
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	55,000	250	15,000
Specific gravity at 25°C	ISO 1675 : 1985	1.85	1.02	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.74
Pot life at 25°C on 1000 g (h)	Gel Timer TECAM			6.5

MECHANICAL PROPERTIES at 23°C (1)			
Hardness	ISO 868 :2003	Shore D15	90
Flexural modulus	ISO 178 :2001	MPa	5,600
Flexural strength	ISO 178 :2001	MPa	88
Tensile strength	ISO 527 :1993	MPa	49
Impact strength (CHARPY) Unnotched specimens	ISO 179/1eU :1994	kJ/m ²	9

(1): Average values obtained on standard specimens after heat treatment indicated in PROCESSING CONDITIONS

PROCESS

Mix the resin before using and plasticate until a homogenous mixing is obtained. Then cast. After gel 24 hours at 20°C, cure 12 hours at 45°C, demould and cure as follows: 1 hour at 60°C, 1 hour at 80°C, 2 hours at 120°C and 4 hours a 160°C. Increase and decrease air temperature at 20°C per hour between the plateau values.

THERMAL AND SPECIFIC PROPERTIES (1)

Glass transition temperature (T _g)	ISO 11359 : 2002	°C	195
Coefficient of linear expansion (CTE) (+20 to +150°C)	ISO 11359: 1999	10 ⁻⁶ K ⁻¹	50
Linear shrinkage (specimen 250x60x40mm)	-	mm/m	1.3
Maximal laminating thickness	-	mm	40
Complete hardening time at 23°C	-	d	5

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 both components is 6 months in a dry place and in original unopened containers at a temperature between 15 to 25°C.

Any open can must be tightly closed under dry inert gas (dry air, nitrogen, etc.).

PACKAGING

EPO 752 RESIN 6 x 1.00 kg 1 x 10.00 kg	EPOLAM 2080 HARDENER 6 x 0.160 kg 1 x 1.600 kg
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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.