

DESCRIPTION

Master models for epoxy prepregs or heat curing composite tools or parts, short run vacuum forming moulds.

PROPERTIES

- High dimensional stability
- Easy machining
- Excellent surface aspect
- Medium density
- High temperature resistance

PHYSICAL PROPERTIES		
Composition		Epoxy
Colour		Green
Specific gravity of cured product at 23°C	ISO 2781 : 1996	0.70

MECHANICAL PROPERTIES at 23°C				
Hardness	- 23°C	ISO 868 :2003	Shore D1	75
	- 80°C			73
	- 100°C			72
	- 120°C			71
	- 130°C			68
Flexural modulus	ISO 178 :2001	MPa	2,300	
Flexural strength	ISO 178 :2001	MPa	37	
Compressive strength at yield	ISO 604 :2002	MPa	50	
Glass transition temperature	ISO 11359 : 2002	°C	130	
Coefficient of thermal expansion (CTE) (10°C to 100°C)	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	35 - 40	

Following these results, LAB 975 NEW can be used up to 130 °C maximum temperature for curing prepregs in autoclave under 4 bars pressure.

ASSEMBLY / FINISH

Axson tooling boards can be bonded with H 8973/GC 15 (about 600g/m²).

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- Ensure good ventilation,
- Wear gloves, safety glasses and waterproof clothes,
- Do not smoke when machining.

For further information, please consult the product safety data sheet.

MACHINING PARAMETERS		
	Cut speed (Vc in m/min)	Feed per tooth (fz in mm/revolution)
Rough shape	100 to 400	0.35
Finish	400 to 800	0.05 à 0.15

$n = (1000 \times Vc) / (\pi \times Dc)$	$Vf = n \times fz \times Z$
--	-----------------------------

- Vc: Cutting speed in m/min
- Dc: cutting diameter in mm
- n: Spindle speed
- fz: Feed per tooth in mm/revolution
- Z: number of teeth
- Vf: feed speed

STORAGE CONDITIONS

The slabs must be stored in a dry place provided

DIMENSIONS

1.500 x 500 x 50 mm
 1.500 x 500 x 75 mm
 1.500 x 500 x 100 mm
 1.500 x 500 x 150 mm
 1.500 x 500 x 200 mm

Other larger dimensions possible in Mass Casting MC 975 NEW (please contact us).

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.