

APPLICATIONS

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

PROPERTIES

- High dimensional stability
- Easy machined
- High-temperature lay-up tools
- Low specific gravity
- High temperature resistance

PHYSICAL PROPERTIES		
Composition	-	Epoxy
Colour	-	Blue
Specific gravity at 23 °C	ISO 2781 : 88	0.75

MECHANICAL AND THERMAL PROPERTIES AT 23 °C			
Hardness	ISO 868 : 85	Shore D1	73
Flexural strength	ISO 178 : 93	MPa	30
Flexural modulus	ISO 178 : 93	MPa	2,200
Compressive strength	ISO 604 : 97	Mpa	50
Coefficient of linear thermal expansion (C _L TE) [+10, +100] °C	T.M.A.-Mettler	10 ⁻⁶ .K ⁻¹	35 - 45
Thermal conductivity	ISO 22007-1 :2009	W /m.K	0.14

Temperature (°C)		23	80	100	120	130
Hardness Shore D à 1 s	ISO 868 : 85	73	71	69	66	63

Owing these results, LAB 973 could be use until a temperature of 125 °C for prepreg curing with 4 bars pressure in autoclave.

ASSEMBLY

Axson LAB 973 tooling board can be bonded with H 8973 / GC15 (consumption about 600 g/m²).

SAFETY PRECAUTIONS

Normal health and safety precautions should be observed when handling this product:

- ensure good ventilation,
- wear gloves and safety glasses.

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

MACHINING PARAMETERS		
	Cutting speed (Cs in m/min)	Feed per tooth (mm/tr)
Roughing cut ⁽¹⁾	100 to 400	0.35
Finishing cut ⁽²⁾	400 to 800	0.05 to 0.15

(1) **Roughing cut:** Cutting parameters are determined with a carbide inserts ball nose endmill:

- Helix angle: 6°
- Clearance angle: 14°

(2) **Finishing cut:** Cutting parameters are determined with a 2 teeth ball nose endmill:

- Helix angle: 30°
- Clearance angle: 14°

Surface painting is recommended: EC 85 AXSON

STORAGE

The slabs must be stored in a dry place provided.

DIMENSIONS

1.500 x 500 x 50 mm

1.500 x 500 x 100 mm

1.500 x 500 x 75 mm

Other larger dimensions possible in Mass Casting MC 973 (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.