

#### DESCRIPTION

**TECHNO LAM 8090 is a 100% reactive epoxy resin.**

**Its low viscosity, light thixotropic and excellent wetting properties make it an ideal compound in the manufacturing of molds, dies and fiberglass reinforced units for the aeronautic industry. This product is also frequently used for the reinforcement of the surface of both polystyrene panels and parts. TECHNO LAM 8090 also offers a superior strength to both water and humidity environments. This system will not damage the polystyrene cells. It is also used as a structural adhesive to assemble polyurethane and epoxy tooling boards.**

#### CHARACTERISTICS

- Excellent wetting properties
- Excellent working properties
- Thixotropic
- Low odor
- Styrene free

#### APPLICATION

Apply the first coat of **TECHNO LAM 8090** with a brush or a roller.

Apply the fiberglass cloth as soon as possible. Make sure to minimize air entrapment between the fiberglass cloth and the first coat. Back rolling with a spike roller will greatly reduce the possibility of air entrapment.

Secure the fiberglass embedding by saturating the lining with a second coat of **TECHNO LAM 8090**.

The uncured components can easily be cleaned by using **solvent 901**.

Please consult **POLYMERES TECHNOLOGIES** for more details based on your application.

#### TYPICAL PROPERTIES (at 22°C)

		PART A	PART B	MIXED
Viscosity	Brookfield cps	2 800	25	900
Consistency		Liquid	Liquid	Liquid
Density	g/cm <sup>3</sup>	1.17	0.98	1.15
Mixing Ratio	By weight	100	20	100/20
Colour		Off White	Yellow	Clear
Pot life	Masse de 200 cc	60 minutes @ 22°C		
Gel time	½" (6"X4" bois)	60 minutes @ 22°C		
	1" (6"X4" bois)	45 minutes @ 22°C		
	1 ½" (6"X4" bois)	-		
Peak exothermic Temperature	ASTM D 2471	208°C		
Full cure*		3 days @ 22°C		

\* After material has solidified full cure can be accelerated at 51.7°C (125°F).

**PHYSICAL PROPERTIES** (solid state) 7 days after cure at 22°C

TEST	METHOD	RESULTS	
Hardness	ASTM D 785	Shore D	81
Compressive strength	ASTM D 695	MPa <sup>†</sup>	81.2
Tensile strength	ASTM D 638	MPa	56
Flexural strength	ASTM D 790	MPa	87.47
Deflection Temperature (°C)	ASTM D 648	1. 455 kPa <sup>‡</sup> 2. 1820 kPa	51.3 50.9
Impact Resistance	ASTM D 256	J/m <sup>§</sup>	33.7
Linear Shrinkage	ASTM D 2566	cm/cm	0.0055
Coefficient of Linear Thermal Expansion	ASTM D 696		7.2 X 10 <sup>-5</sup>
Abrasion resistance	Taber CS-17 – 1000 gr		0.057
Glass transition (Tg)	ASTM E1356-08	°f/°C	239/114.8

**PRECAUTIONS**

- Consult Material Safety Data Sheet prior to use.
- Do not mix more material possible to apply within the recommended pot life.
- Normal health and safety precautions should be observed when handling these products :
  - Ensure good ventilation
  - Wear gloves, safety glasses and waterproof clothes.
- Shelf life of product in original closed containers is **one (1) year**.
- **SHELF LIFE:** The shelf life on **POLYMÈRES** products begins from the date of invoice for that product shipment. **POLYMÈRE's** shelf life only pertains to containers that are unopened and in their original condition.
- Once the container is opened **POLYMÈRES** has no control or responsibility for the shelf life.
- It is recommended to follow Provincial and Federal safety regulations. In case of eye contact, rinse well with water, in case of skin contact, rinse with soap and water. Keep away from children.

**GUARANTEE**

Having no control on the use and applications of this product, the manufacturer and/or distributor cannot guarantee the results achieved. The warranty is therefore limited to the replacement of a product whose user can demonstrate, in a way that is satisfactory to both manufacturer and distributor, that it is in fact defective. Before using this product, the user must ensure that it is appropriate for the chosen purpose. The user assumes all risks related to this use. The user must ensure that the product meets his or her needs by testing it at the short, medium, and long-term to validate the results in the intended operating conditions and following the prepared instructions. This limited warranty disclaims any liability for indirect, accidental, or special damages. Except for the warranty described above, the user expressly recognizes and accepts that, upon purchase of this product, the manufacturer and/or distributor disclaim any other responsibility and that any other warranties, express or implied, related to a warranty of merchantability and to an implicit warranty related to the quality of materials are expressly excluded.

<sup>†</sup> 1 MPa = 145 lb

<sup>‡</sup> 1 kPa = .145 lb

<sup>§</sup> 53.4 KJ m = 1 lbF po2