



DESCRIPTION

TECHNO BOND 8090HT is a 100% reactive high temperature epoxy laminating/bonding resin.

It is also used as a structural adhesive to assemble polyurethane and epoxy tooling boards. 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 and polyurethane panels and parts. This system will not damage the polystyrene cells.

CHARACTERISTICS

- Excellent wetting properties
- Excellent working properties
- Thixotropic
- Low odour
- Styrene free
- Fast post cure schedule & economical

APPLICATION

It is recommended to mix Part A very well before adding to Part B to eliminate any sedimentation within the resin.

Add 25 parts of Part B to 100 parts of Part A in weight and mix very well until a uniform color is obtained. Minimise as much as possible air bubbles within the resin and pour slowly into the prepared mold adequately.

Post-Cure :After the application, let cure for a period of 24 hrs at 22°C. After this period, the pieces will be breakable, therefore manipulate gently. Then, proceed post-cure schedule as follows :

2 hours at 120°C
3 hours at 150°C

It is immediately possible after the application to gain some time to go immediately with the Post-cure schedule mentioned above.

It is recommended to use a demoulding agent **Techno Release 110** to facilitate the procedures.

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	250	1 350
Consistency		Liquid	Liquid	Liquid
Density	g/cm ³	1.17	0.975	1.10
Mixing Ratio	By weight	100	26	100/26
Colour		Off White	Yellow	Clear
Pot life	Masse de 200 cc	> 2 hours @ 22°C		
Gel time	1/2" (6"X4" wood) 1" (6"X4" wood) 1 1/2" (6"X4" wood)	5 hours @ 22°C		
Peak exothermic Temperature	ASTM D 2471	208°C maximum		
Full cure*		24 hours at 22°C + post cure		

* 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 (65)	Shore D	87
Compressive strength	ASTM D 695 (80)	MPa [†]	110
Tensile strength	ASTM D 638 (82)	MPa	72
Flexural strength	ASTM D 790 (81)	MPa	120
Deflection Temperature (°C)	ASTM D 648 (82)	1. 455 kPa [‡]	150
	ASTM D 648 (82)	2. 1820 kPa	130
Impact Resistance	ASTM D 256 (81)	J/m [§]	33.7
Linear Shrinkage	ASTM D 2566 (79)	cm/cm	0.0055
Coefficient of Linear Thermal Expansion	ASTM D 696 (79)		7.2 X 10 ⁻⁵
Abrasion resistance	Taber CS-17 – 1000 gr		0.057
Glass transition (Tg)	ASTM E1356-08	°F/°C	356/180

*** Average values on test samples of unreinforced resin, cured according to postcure listed above.**

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 TECHNOLOGIES'S** products begins from the date of invoice for that product shipment. Shelf life only pertains to containers that are unopened and in their original condition.
- 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

Seller makes no warranty of any kind, express or implied, as to the merchantability, fitness for any particular purpose, or any other matter with respect to the product **TECHNO BOND 8090 HT**. Since conditions of use are beyond seller's control, buyer assumes all risk of use of this product. Under no circumstances will seller be liable for

[†] 1 MPa = 145 lb

[‡] 1 kPa = .145 lb

[§] 53.4 KJ m = 1 lbF po2



POLYMÈRES
technologies

TECHNO BOND 8090HT

consequential or incidental damages arising out of the use of this product. Seller's sole obligation shall be to replace the product if found to be defective. It is the user's responsibility to determine the suitability for use of this product under the conditions present at the time of application. M.S.D.S. available upon request.