



POLYMÈRES
technologies

**TECHNO
FUSION**

8000HT

Epoxy infusion resin
High temperature

DESCRIPTION

TECHNO fusion 8000 HT is a 100% reactive high temperature epoxy infusion resin. TECHNO INFUSION™ 8000HT is a high-performance two-part epoxy infusion resin designed for manufacturing composite molds and parts that withstand high temperatures.

Formulated with 100% reactive materials, it offers exceptional wetting properties and an ultra-low mixed viscosity of 450 cps, ensuring optimal fiber impregnation.

Its industry-leading thermal resistance is achieved with a fast 5-hour post-cure, delivering a durable 85 Shore D hardness. Ideal for aerospace, automotive, and industrial applications, this advanced system ensures precision, strength, and efficiency in composite manufacturing.

Its low viscosity and optimal wetting properties make it an ideal compound for composite parts and medium to large dimension molds manufacturing, exposed to high temperature environment

The high heat capacities make the TECHNO FUSION 8000 HT unique in the industry, with only 5 hours post-cure.

CHARACTERISTICS

- Excellent wetting properties
- Excellent high temperature resistance
- Low viscosity
- Long pot life
- Fast post cure schedule & economical

APPLICATION

Add 26 parts of part B to 100 parts of Part A in weight and mix very well. Minimize as much as possible air entrapment.

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 recommended to use a demoulding agent **Techno Release 110** to facilitate the procedures, if applicable.

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) | 700 | 200 | 450 |
| Consistency | | Liquid | Liquid | Liquid |
| Density | (g/cm ³) | 1.17 | 0.975 | 1.10 |
| Mixing ratio | By weight | 100 | 26 | 100/26 |
| Pot life | 250 gr mass | >215 min at 22°C | | |
| Full cure | | 24-36 hours at 22°C + post-cure | | |

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

| TEST | METHOD | RESULTS | |
|-----------------------|---------------|---------|---------|
| Hardness | ASTM D 785 | Shore D | 85 |
| Flexural modulus | ASTM D 790 | Psi | 420 609 |
| Flexural strength | ASTM D 790 | Psi | 7 251 |
| Glass transition (Tg) | ASTM E1356-08 | °F/°C | 424/218 |

***NOTE: The samples have been tested on a resin, without reinforcement, following post-cure**

PRECAUTIONS

- Consult Material Safety Data Sheet prior to use.
- Normal health and safety precautions should be observed when manipulating material :
 - Use adequate ventilation system.
 - Wear protection equipment.
- **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.
- Shelf life of product in original closed containers is **one (1) year**.
- 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.