



POLYMÈRES
technologies

TECHNO CAST™ 8036

EPOXY RESIN

DESCRIPTION

TECHNO CAST 8036 is a two-component, 100% reactive clear amber epoxy resin, designed with low viscosity for improved component infiltration, making it ideal for applications such as electronic component encapsulation that require impact resistance. Its low exothermic reaction during curing minimizes heat buildup, ensuring the safety of sensitive components.

This versatile resin can be poured in thin layers or up to 1 1/2 inches thick in a single pour.

It offers the perfect balance between hardness and flexibility, allowing for movement and impact resistance without compromising performance.

It is perfect for producing colored aesthetic parts and can also be used as a binder for aggregates, quartz, or silica. Common applications include decorative cast pieces, trophies, and encapsulation projects, offering both functional and aesthetic benefits.



CHARACTERISTICS

- Negligible shrinkage
- Fast curing time
- Wear resistance
- Excellent working properties
- Impact Resistance
- Low Viscosity
- Vibration Resistance
- Hardness & Flexibility Balance

APPLICATIONS

It is highly recommended to remix separately parts A and B before mixing them together. Mix **2 volumes** of **A** with **1 volume** of **B** (or **100 A/42.6 B** in **weight**) and mix mechanically 5 minutes. After mixing, add slowly the aggregates until complete saturation. Make sure particles are completely wet with resin. Minimize air entrapment by pouring slowly into properly prepared receiving mould.

The use of a good release agent such as **TECHNO RELEASE 110** will facilitate the demoulding operation. The uncured components can be easily cleaned by using the **solvent T-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)	6 000	25	700
Consistency		Liquid	Liquid	Liquid
Density	g/cm ³	1.15	0.98	1.09
Mixing Ratio	1. By weight	2	1	2/1
	2. By volume	100	42.6	100/42.6
Color		Amber	Amber	Amber
Pot life		40 minutes		
Gel time	½"	1 hour 15 minutes		
	1"	1 hour 05 minutes		
	1½"	1 hour		
Peak exothermic temperature	ASTM D 2471-71	143°C		
Full cure*		7 days		

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

TEST	METHOD	RESULTS	
Hardness	ASTM D 785 65	Shore D	78
Compressive strength	ASTM D 638 80	MPa [†]	44
Tensile Strength	ASTM D 638 82	MPa	35
Flexural Strength	ASTM D 790 81	MPa	28 (no failure)
Deflection Temperature		1. 455 kPa [‡]	44°C
		2. 1820 kPa	37°C
Impact Resistance	ASTM D 256 81	J/m [§]	72
Linear Shrinkage	ASTM D 2566 79	cm/cm	0.012
Abrasion Resistance	TABER CS 17-1000 GR		0.070
Coefficient of Linear Thermal Expansion	ASTM D 696 79		8.63 x 10 ⁻⁵

PRECAUTIONS

- Consult Material Safety Data Sheet prior to use.
- Do not mix more material than possible to apply within the recommended port life.
- Ensure proper ventilation.

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

† MPa = 145 lb

‡ kPa = .145 psi

§ 53.4 J/m = 1 blF/inch



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**TECHNO
CAST™**

8036

- Shelf life of product in original closed containers is **one (1) year**.
- 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.