

## Polyurethane Casting Resin (High Impact Resistance)"

### DESCRIPTION

TECHNO CAST 3477 IS A 100% SOLIDS, REACTIVE POLYURETHANE SYSTEM WITH VERY LOW VISCOSITY AND HIGH IMPACT RESISTANCE. ITS LOW VISCOSITY AND SHORT POT LIFE MAKE IT IDEAL FOR CASTING SMALL TO MEDIUM-SIZED PARTS WITH MINIMAL AIR ENTRAPMENT.

TECHNO CAST 3477 IS SUITABLE FOR VARIOUS INDUSTRIAL APPLICATIONS REQUIRING HIGH IMPACT RESISTANCE, VIBRATION RESISTANCE, AND ELONGATION. IT IS IDEAL FOR MANUFACTURING UNBREAKABLE PARTS WITH EXCELLENT ABRASION AND FATIGUE RESISTANCE, SUCH AS TECHNICAL COMPONENTS FOR ROAD VEHICLES, INDUSTRIAL EQUIPMENT PARTS, AND FOUNDRY MOLDS, AMONG OTHERS.

ITS FAST DEMOLDING TIME ALLOWS FOR HIGH PRODUCTIVITY AND RAPID MOLD TURNAROUND. AVAILABLE IN SEVERAL COLORS.

### FEATURES

- Excellent physical properties
- High impact resistance
- Easy 1:1 volume mixing ratio
- Very low viscosity
- Excellent handling characteristics
- Fast cure
- Minimal mass shrinkage

### APPLICATION INSTRUCTIONS

STORE TECHNO CAST 3477 ON A PALLET (DO NOT PLACE DIRECTLY ON THE FLOOR) OR SHELF AT 22°C (72°F) AND RELATIVE HUMIDITY BELOW 60%. COLD ENVIRONMENTS WILL INCREASE VISCOSITY OF PARTS A AND B, WHILE WARMER CONDITIONS WILL REDUCE IT.

BEFORE USE, THOROUGHLY MIX EACH PART (A AND B) SEPARATELY. MIX GENTLY FOR AT LEAST 5 TO 10 MINUTES USING A METAL SPATULA TO MINIMIZE AIR ENTRAPMENT.

MIX 1 PART A WITH 1 PART B BY VOLUME (OR 100 A / 117 B BY WEIGHT) IN A CLEAN, DRY CONTAINER. ENSURE A UNIFORM BLEND BY SCRAPING THE SIDES AND BOTTOM OF THE CONTAINER.

SINCE THE POT LIFE IS 11 MINUTES AT 22°C FOR A 200-GRAM BATCH, DO NOT MIX MORE MATERIAL THAN CAN BE Poured WITHIN THE POT LIFE. NOTE THAT WARMER ENVIRONMENTS WILL SHORTEN POT LIFE, WHILE COOLER CONDITIONS WILL EXTEND IT.

UNCURED MATERIAL CAN BE CLEANED USING SOLVENT T-905.

FOR MORE INFORMATION, CONTACT POLYMÈRES TECHNOLOGIES AT: [SUPPORT@POLYMERESTECHNOLOGIES.COM](mailto:SUPPORT@POLYMERESTECHNOLOGIES.COM)

PROPRIÉTÉS TYPIQUES (à 22°C)

		PART A	PAR B	MIXED
Viscosity	Brookfield (cps)			
Consistency		Liquid	Liquid	Liquid
Density	g/cm <sup>3</sup>	1.021	1.186	1.08
Mix Ratio (Volume)	1. In volume	1	1	1/1
	2. In weight	100	117	100/117
Couleur		Colored	amber	Colored
Pot Life		11 minutes		
Gel Time		15 minutes		
Max Exotherm Temp	ASTM D 2471-71	95°C		
Full Cure		2 days @ 22°C		

PROPRIÉTÉS PHYSIQUES (état solide) après 7 jours à 22°C

ESSAIS	METHODE	RESULTS	
Hardness (Shore D)	ASTM D 785 65	Shore D	73
Résistance à la compression	ASTM D 695 80	MPa <sup>*</sup>	48.5
		% max. strain	45.72%
Tensile Strength	ASTM D 638 TYPE 1	MPa	58.5
Flexural Strength	ASTM D 790A	MPa	49 (No breaks)
Elongation	ASTM D-790A	%	10
Heat Deflection Temp.		1. 455 kPa <sup>†</sup>	47°C
		2. 1820 kPa	34°C
Impact Resistance	ASTM D 256 81	J/m <sup>†</sup>	0.75
Linear Shrinkage	ASTM D 2566 79	cm/cm	0.0068
Abrasion Resistance	TABER CS 17-1000 GR		0.061
Thermal Expansion Rate	ASTM D 696 79		7.88 x 10 <sup>-5</sup>
PACKAGING	7.56 LITERS ET 37.8 LITERS		

\* MPa = 145 lb

† kPa = .145 psi

‡ 53.4 J/m = 1 bIF/inch

**PRECAUTIONS**

**CONSULT THE SAFETY DATA SHEET BEFORE USE.**

**FOLLOW PROPER INDUSTRIAL HYGIENE:**

- **ENSURE ADEQUATE VENTILATION**
- **WEAR GLOVES, GOGGLES, AND PROTECTIVE CLOTHING**

**SHELF LIFE: ONCE THE CONTAINER IS OPENED, POLYMÈRES TECHNOLOGIES ASSUMES NO RESPONSIBILITY.**

**UNOPENED CONTAINERS HAVE A SHELF LIFE OF ONE (1) YEAR.**

**FOLLOW ALL APPLICABLE PROVINCIAL AND FEDERAL SAFETY REGULATIONS.**

**IN CASE OF EYE CONTACT, RINSE THOROUGHLY WITH WATER AND SEEK MEDICAL ATTENTION.**

**IN CASE OF SKIN CONTACT, WASH THOROUGHLY WITH SOAP AND WATER.**

**KEEP OUT OF REACH OF CHILDREN.**

Since we have no control over the use or application of this product, the manufacturer and/or distributor cannot guarantee results. Warranty is limited to the replacement of proven defective material. The user must ensure the product is suitable for their intended use and assumes all risks. Suitability must be verified through short-, medium-, and long-term testing under actual use conditions.

This limited warranty excludes any liability for indirect, incidental, or special damages.

By purchasing this product, the user expressly acknowledges and accepts that the manufacturer and/or distributor disclaims any other warranty, express or implied, including merchantability or fitness for a particular purpose.