

# CHILL ICE 1™

For small to medium  
sized castings  
(1 to 1.5" thick)

MIXING RATIO

# 2:1

## CHARACTERISTICS

Crystal clear transparency

High quality raw materials

Excellent impact resistance

100% solid

No withdrawal

Self leveling



Contact

POLYMÈRES TECHNOLOGIES

for more information:

[support@polymerestechologies.com](mailto:support@polymerestechologies.com)

## DESCRIPTION

CHILL ICE 1™ is an epoxy system with high UV resistance made with 100% reactive materials.

Its extended pot life makes it the perfect system for small and medium sized projects up to 1.5 inches (38 mm) in a single casting while offering exceptional transparency. It is the perfect product for charcuterie boards, small river tables, deeper cracks, and more.

Its very low viscosity ensures maximum infiltration of thin interstices in molds or the different substrates on which this product is poured.

## INSTRUCTIONS

### PREPARATION

Before using CHILL ICE 1™, mix 2 volumes of part A with 1 volume of part B (or 100 A for 42 B by weight). Mix slowly and evenly with a metal spatula during 5 to 10 minutes while making sure to scrape the edges and bottom of the container.

### USAGE

As the pot life of this system is 500 minutes at 22°C (72°F) for a mass of 200g, it is possible to mix many liters at once and pour a large quantity of resin. It is important to note that pot life will shorten in a warmer environment and will lengthen in a cooler one. Also, the more resin is mixed, the more its pot life decreases.

### STORAGE

Store CHILL ICE 1™ on a pallet or shelf at 22°C (72°F) and at a relative humidity under 60%. A cold environment will increase the viscosity of parts A and B and a warm environment will decrease it. Uncured material can be easily cleaned with isopropyl alcohol or with POLY CLEANER™.



Slow setting epoxy  
Pot life of 500 minutes

A/B kits available in 1.5L, 3L, 12L,  
30L and 60L sizes

CHILL  
**EPoxy**™  
By Polymères Technologies

### TYPICAL PROPERTIES (AT 22 °C/72 °F)

		PART A	PART B	MIX
VISCOSITY	Brookfield (cps)	725	50	195
CONSISTENCY		Liquid	Liquid	Liquid
DENSITY	g/cm <sup>3</sup>	1.08	0.95	1.03
MIXING RATIO	By volume	2	1	2/1
	By weight	100	42	100/42
COLOR		Transparent	Transparent	Transparent
POT LIFE	200g	500 minutes		
DEMOLDING TIME		3 to 4 days depending on mass		
PEAK EXOTHERMIC TEMPERATURE	ASTM D 2471-71	86°C		
FULL CURE*		7 days		

\*After material has solidified, the curing process can be accelerated at 51.7°C (125°F).

## PRECAUTIONS

- Consult material safety data sheet prior to use.
- Normal health and safety measures should be observed when handling this product.
- Ensure good ventilation.
- Wear gloves, safety glasses, and protective clothing.
- Once the container is opened, POLYMÈRES TECHNOLOGIES can no longer be held responsible for this product.
- Shelf life of product in original closed containers is one (1) year.

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### PHYSICAL PROPERTIES (SOLID STATE AFTER 7 DAYS AT 22 °C/72 °F)

TEST	METHOD	RESULTS	
HARDNESS	ASTM D 785 65	Shore D	81
COMPRESSIVE STRENGTH	ASTM D 695 80	MPa*	88.34
		Maximum strain %	4.2%
TENSILE STRENGTH	ASTM D 638 Type 1	MPa	45
FLEXURAL STRENGTH	ASTM D 790A	MPa	120
ELONGATION	ASTM D 790A	MPa	4.9%
DEFLECTION TEMPERATURE		455 kPa**	52°C
		1820 kPa	46°C
IMPACT RESISTANCE	ASTM D 256 81	J/m***	76
LINEAR SHRINKAGE	ASTM D 2566 79	cm/cm	0.0026
ABRASION RESISTANCE	TABER CS 17-1000 GR	0.060	
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D 696 79	4.085 x 10 <sup>-5</sup>	

\*1 MPa = 145 lbs  
 \*\*1 kPa = 0.145 psi  
 \*\*\*53.4 J/m = 1 blF/po

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 over the use and application of this product, the manufacturer and/or distributor cannot guarantee the result obtained. The warranty is therefore limited to the replacement of a product that the user has demonstrated to the satisfaction of the manufacturer and distributor that it is actually defective. Before using this product, the user must ensure that the product is suitable for its intended use. Only the user assumes the risks related to this use. The user must ensure that this product meets his needs by conducting tests in the short, medium and long term to validate the results and in the conditions of use and according to the instructions provided. This limited warranty excludes all liability for consequential, incidental or special damages. Except as described above, the user expressly acknowledges and accepts at the time of the purchase of this product that the manufacturer and / or distributor disclaims any other liability and any other express or implied warranty of quality and an implied warranty of quality of the material are expressly excluded.

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