



ICECAST: CLEAR EPOXY CASTING

TECHNICAL DATA SHEET

DESCRIPTION

ICECAST is a two component epoxy casting system. It is UV resistant and has anti-yellowing properties, strong adhesion, good fluidity, natural defoaming. **It is used for mass castings with thicknesses greater than 1 inch (2.5 cm) and up to 4-10 inches (10-25 cm) depending on the volume.** The low color and low viscosity allow for bubble free, crystal clear castings ideal for casting, potting and embedding applications. It is formulated for a long gel time, with low exothermic heat buildup. ICECAST has a low VOC content, for user safety and reduced environmental impact.

PRIMARY APPLICATIONS

- Embedding and encapsulation
- Resin jewelry
- River castings
- Bar top or table top
- Molding resin
- Art or crafting resin
- High build coatings
- Mass castings

TECHNICAL SPECIFICATIONS AND MECHANICAL DATA

COLOR	Clear
MIX RATIO, BY VOLUME	2:1 (RESIN: HARDENER)
MIX RATIO, BY WEIGHT	2:1 (RESIN: HARDENER)
MIXED VISCOSITY @ 73°F (23°C)	1200 CPS
WORKING TIME @ 73°F (23°C)	2h
GEL TIME @ 73°F (23°C)	4h
DRY TOUCH	24-36 h relative to the mass
IDEAL WORKING TEMPERATURE RANGE	OPTIMAL 59 - 70°F (15 - 21°C)
MINIMUM CASTABLE AMOUNT @ 77°F (25°C)	1.5 gallons (5.67L)
MAXIMUM CASTABLE AMOUNT @ 77°F (25°C)	15 gallons (60 L)
PEAK EXOTHERM	100°F (38°C)
RECOMMENDED FULL CURE	5 DAYS
TENSILE STRENGTH	9500 PSI
ELONGATION	6.7%
FLEXURAL STRENGTH	15500 PSI
COMPRESSION STRENGTH	8.4 kg/mm ²
TG ULTIMATE	203°F (95°C)
HARDNESS, SHORE D	82
VOC	0 g/L

IMPORTANT NOTES

- The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage.
- The indicated viscosity is for clear product only. Any addition of colorant may affect the viscosity.

MIX RATIO
2A : 1B

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APPLICATION

Make sure that the room temperature of the ICECAST resin and hardener is maintained at 59 - 70°F (15 - 21°C). In a dry, clean container mix 2 parts of resin (A) with 1 part of hardener (B). Minimize air formation as much as possible by gently mixing for 1 to 2 minutes with a metal spatula. Stir well along the inner wall of the container and then let it stand for 3-5 minutes.

According to the operation time and dosage, adjust the amount to avoid waste. The barrel lid must be sealed after use to avoid product scrapping due to moisture absorption. It is important to note that the pot lifetime will be shortened in a warmer environment and lengthened in a cooler climate. Hence the handling time will reflect the temperature level. Also, the greater the amount of resins to be mixed, the shorter the pot's time will be.

When the relative humidity is greater than 85%, the surface of the cured product easily absorbs moisture in the air to form a white mist. Therefore, when the relative humidity is greater than 85%, it is not suitable for curing at room temperature. It is recommended to use warm curing. If it is to be ground, it needs to be 3 days after it is fully cured.

CLEANING

Clean all application equipment with acetone. Once the product has hardened, it can only be removed by sanding. It is advisable to clean immediately after use.

RESTRICTIONS

- ICECAST should be stored in a dry place between 59 - 70°F (15 - 21°C), out of the sun and out of reach of children.
- Resin and hardener should not be left in an open container.
- Application should be used where humidity is under 60% and temperature is between 59 - 70°F (15 - 21°C)
- Use a de-humidifier if needed.
- ICECAST should be used within one year of purchase.

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of ICE EPOXY. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. ICE EPOXY assumes no legal responsibility for use upon these data. ICE EPOXY assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product.