Crystal-Clear Epoxy Resin Casting and Coating

Epoxy resin is a two-component system. Part A is resin and Part B is the hardener, suitable for a variety of industrial and art-related projects requiring a rigid, clear finished casting. It can be used on; river tables, live edge slabs, jewelry, crafts and art casting, tabletops, wood coatings, boat building, art, crafts, decoupage coatings, & marine applications.

Product	Description
SuperCAST31	Epoxy Resin Casting for Art, Jewelry, Crafts, A:B=3:1 by weight, Maximum casting thickness of 1 cm
SuperCAST31 Pro	Epoxy Resin Casting for Art, Jewelry, Crafts, river tables, live edge slabs, and art casting, A:B=3:1 by
	weight, Maximum casting thickness of 2-3 cm
Deepour21	The Best DEEP Pour Epoxy, for river tables, live edge slabs, and art casting, A:B=2:1 mix by weight,
	Slow heat cycle, slow epoxy exothermic reaction prevents cracking and shrinkage from excess
	heat, Maximum casting thickness of 4-7 cm
SuperCast 11	Epoxy Resin Casting for Art, Jewelry, Crafts, river tables, live edge slabs, and art casting, A:B=1:1 by
	volume, Maximum casting thickness of 1-2 cm

Physical Properties	SuperCAST	SuperCAST	Deepour	SuperCast
Test @25° C	31	31 Pro	21	11
Hardness (Shore D)	80-83 D	80-83 D	80-89 D	70-80 D
Mixing ration	A:B=3:1	A:B=3:1	A:B=2:1	A:B=1:1
	by weight	by weight	by weight	by volume
Color	A: Clear	A: Ultra Clear	A: Ultra Clear	A: Ultra Clear
	B: Clear	B: Ultra Clear	B: Ultra Clear	B: Ultra Clear
Mixed Viscosity (cps)	500-800 cps	500-800 cps	500-800 cps	500-800 cps
Working time (Hours)	1 hour	1 hour	2-3 hour	30-40 mins
Curing time (Hours)	8-10 Hours	8-10 Hours	12-24 Hours	4-5 Hours
Specific Gravity	1.07	1.07	1.10	1.10
Maximum Mixed Volume	5 kgs	10 kgs	10-15 kgs	0.5-1 kgs
Maximum Casting Thickness (cm)	1 cm	2-3 cm	4-7 cm	1-2 cm







SuperCAST31 Key features

- Crystal clear
- Very low viscosity for easy mixing and minimal bubble entrapment •
- Self Leveling, Superior Air Release, Easy To Use •
- Super gloss •
- Durable, rock-solid, Low Odor •

Application

Jewelry, crafts and art casting, and art-related projects requiring a rigid, clear finished casting

Package

Kit	500g kit	1 kg kit	14 kg kit
Resin	375g/bottle	750g/bottle	3.5kg/bottle*3
Hardener	125g/bottle	250g/bottle	3.5kg/bottle









SuperCAST31 Pro Key features

- Ultra-clear
- Very low viscosity for easy mixing and minimal bubble entrapment •
- Self Leveling, Superior Air Release, Easy To Use •
- Super Gloss Durable Finish •
- UV stable, formulated with the high UV inhibitors to resist yellowing •
- Durable, rock-solid, Low Odor •

Application

Epoxy Resin casting and coating for Art, Jewelry, Crafts, river tables, live edge slabs, and Bar Tops, Tables & Counters coating, a variety of industrial and art-related projects requiring a rigid, clear finished casting

Package

Kit	500g kit	1 kg kit	14 kg kit
Resin	375g/bottle	750g/bottle	3.5kg/bottle*3
Hardener	125g/bottle	250g/bottle	3.5kg/bottle





Deepour21 Key features

SUPER SILICON

- SINGLE 2" POURS: No more days and days of pouring multiple thin layers and no sanding between coats • is needed
- CRYSTAL CLEAR POURS: Crystal clear thick pour epoxy perfect for clear river tables and clear object castings.
- FLAWLESS COLORANT MIXING: River tables, wood voids, art object castings, and pen turning blocks will have gorgeous effects with colorants
- LONG WORK TIME: Slow exothermic reaction allows excess heat to efficiently escape preventing cracks as it cures.
- HIGHEST EPOXY RESIN UV PROTECTION: Added UV Inhibitors resist yellowing from Ultra Violet light sources
- Easy to use, 2:1 by volume mix ratio

Application

Deepour21# Liquid Glass 2" Thick Deep Pour Amazing Epoxy is PERFECTLY FORMULATED for:

- Epoxy Resin Wood Table Top Diy!
- Epoxy River Coffee Tables!
- Epoxy Resin Coffee Tables!
- Colored Epoxy For Wood!
- Epoxy Resin Wood Art!
- ✓ Epoxy Resin Dining Table!
- ✓ Resin Geode Art!
- ✓ Resin Wood Art!
- ✓ And More Cool Epoxy Projects!

Package

Kit	3 kg kit	10.5 kg kit	
Resin	2kg/bottle	3.5kg/bottle*2	
Hardener	1kg/bottle	3.5kg/bottle*1	







SuperCAST 11 Key features

- Ultra-clear
- Very low viscosity for easy mixing and minimal bubble entrapment
- Self Leveling, Superior Air Release, Easy To Use
- Super Gloss Durable Finish
- UV stable, formulated with the high UV inhibitors to resist yellowing •
- Durable, rock-solid, Low Odor •

Application

Epoxy Resin casting and coating for Art, Jewelry, Crafts, and Bar Tops, Tables & Counters coating, a variety of industrial and art-related projects requiring a rigid, clear finished casting

Package

Kit	500g kit	1 kg kit	7 kg kit
Resin	250g/bottle	500g/bottle	3.5kg/bottle
Hardener	250g/bottle	500g/bottle	3.5kg/bottle

Storage & shelf-life

9 months, should be stored in original, unopened containers between 15 and 25°C.

Always tightly reseal containers after use. Air, moisture or other contamination causes a reduction in reactivity over time, out of direct sunlight and away from direct sources of heat.





Instructions

SUPER SILICON

Preparation – Avoid breathing fumes – use in a well-ventilated area at a minimum. NIOSH approved respirator is recommended. Wear safety glasses, long sleeves and rubber gloves to minimize skin contact.

Materials should be stored and used in a room temperature environment (73°F/23°C). Elevated temperatures will reduce Pot Life. Resin and Hardener must be properly measured and thoroughly mixed to achieve full, high-strength, solid-cure properties.

Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if the performance of this material is in question.

Applying A Release Agent – For releasing epoxy from non-porous surfaces such as resin, metal, glass, etc., use release agent to prevent adhesion.

IMPORTANT: To ensure thorough coverage, lightly brush the release agent with a soft brush over all surfaces of the mold or model. Follow with a light mist coating and let the release agent dry for 30 minutes.

Measuring / Dispensing

You must use an accurate scale (gram scale or triple beam balance scale) to weigh these components properly. Do not attempt to measure components by volume.

Mixing tools and containers should be clean and dry. Mixing should be done in a well-ventilated area. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. Combine resin with the appropriate amount of hardener. Mix thoroughly for 3 minutes making sure that you scrape the bottom and sides of the container several times.

Adding Color – Epoxy Resin can be colored with colorants or Cast Magic Effects Fillers. Pre-mix color or filler with Part A thoroughly and then add Part B.

Mixing – Be sure mixing utensils are clean and free of any potential contaminants such as dirt, dust or grease. Mix Parts A and B thoroughly for at least 3 minutes with a square-edged mixing stick. Be aggressive and scrape sides and bottom of mixing container several times. Use the square edge of mixing stick to bring material off of the sides of the container and blend. If using a drill mixer, follow with hand mixing as directed above to ensure thorough mixing.

Adding Fillers – A variety of dry fillers can be added. Pre-mix dry filler with Part A before adding Part B. IMPORTANT: Mixed epoxy resin is exothermic, meaning it generates heat. A concentrated mass of mixed epoxy in a confined area such as a mixing container can generate enough heat to melt a plastic cup, burn skin or ignite combustible materials if left to stand for its full Pot Life. Do not use foam or glass mixing containers or pour sections thicker than suggested thickness, If a batch of mixed epoxy begins to exotherm, move it to an open-air environment.

Pouring – If casting epoxy resin into a rubber mold, pour the mixture in a single spot at the lowest point of the mold or enclosure. Let the mixture seek its level. A uniform flow will help minimize entrapped air. Recommended casting thickness maximum SuperCAST 31 Pro is 3 cm, Deepour 21 is 5 cm, SuperCAST 11 is 2-3 cm.

Layer Pouring – When pouring epoxy resin in layers, allow the previous layer to fully cure and come to room temperature (73°F / 23°C) before pouring additional layers.







SUPER SILICON Technical Datasheet

Cure Time: Refer to specified Cure Times at room temperature depending on mass. Cured material will be hard and unable to penetrate with a fingernail. Cured epoxy can now be dry sanded. If machining or sanding, wear NIOSH approved mask to prevent inhalation of particles. Pot Life and Cure Time values are dependent on mass and mold configuration, as epoxies are mass-sensitive. Let cure for 24 hours at room temperature. Castings that are ¼ in. the thickness or less will cure more slowly and may require up to 48 hours to fully cure at room temperature.

Performance: Cured castings are very hard and durable. They resist moisture, moderate heat, solvents, dilute acids and can be machined, primed/painted or bonded to other surfaces (any release agent must be removed). If machining castings, wear a dust mask or other apparatus to prevent the inhalation of residual particles.

Castings can be displayed outdoors after painting with an aliphatic urethane clear coat (such High Gloss Polyurethane Topcoat). Unpainted castings will yellow after being exposed to UV light or excessive heat above 115°F/46°C.





