



Duraclear Epoxy is a clear, UV stabilized epoxy system designed specifically for casting, potting and embedding applications.

TECHNICAL DATA

- Low Odor
- Extremely Durable
- Easy to Use
- Crystal Clear
- Self Leveling
- Extended Cure Time
- Superior Air Release
- Impact Resistant
- 100% Solids
- Low Viscosity
- High Gloss Waterproof Finish

USES

- Warehouse and Garage Floors
- Manufacturing Plants, Workshops Educational Facilities and Hospitals
- Chemical Resistant Production Rooms and Loading Docks
- Kitchen Floors, Laboratories, Retail Stores
- Hobby Tools

Clear, Low Viscosity Liquid Epoxy Resin for Casting, Potting, and Embedments

DURACLEAR EPOXY is a clear, UV stabilized epoxy system designed specifically for casting, potting, and embedding applications. Low color and low viscosity allow for bubble free, crystal clear castings ideal for art and hobby applications. The system features two hardener speeds; slow (CCS) for high build casting resin applications and fast (CCF) for quick, small project fast casting resin applications such as resin jewelry and more. Super Sap – Make Things Better.

MECHANICAL DATA		
Tensile Modulus (ASTM D638)	448,000 psi (3.1 GPa)	440,850 psi (3. GPa)
Tensile Strength (ASTM D638)	8,140 psi (56.1 MPa)	7,910 psi (54.5 MPa)
Elongation (ASTM D638)	6%	6.5%
Flexural Modulus (ASTM D790)	390,000 psi (2.7 GPa)	409,670 psi (2.8 GPa)
Flexural Strength (ASTM D790)	11,850 psi (81.7 MPa)	11,100 psi (76.5 MPa)
Compression Strength (ASTM D695)	12,380 psi (85.4 MPa)	10,860 psi (74.9 MPa)
Tg Ultimate (DSC, midpoint)	119°F / 34°C	127°F / 39°C
Hardness (Shore D)	70-80	70-80



PROCESSING DATA		
Mix Ratio (by volume)	2:1	2:1
Mix Ratio (by weight)	100:43	100:43
Viscosity (A/B/Mixed @ 77 °F/25 °C)	1850/35/280	1850/25/195
Component Density (specific density @ 77°F/25°C)	1.12 (epoxy), 0.97 (hardener)	1.12 (epoxy), 0.95 (hardener)
Mixed Density (specific density @ 77°F/25°C)	1.07	1.07
Pot Life (@ 77°F/25°C)	90 min	360 min
Tack Free Time (@ 95°F/35°C)	24 hrs	72 hrs
Recommended Full Cure	7 days @ 77°F / 25°C, Post cure recommended	7 days @ 77°F / 25°C, Post cure recommended

ENVIRONMENT DATA		
VOC Content (ASTM D2369)	0.08 lbs/gal (9.2 g/L)	0.07 lbs/gal (8. g/L)
Biobased Carbon Content (ASTM D6866)	17%	17%

SURFACE PREPARATION: All surfaces must be clean, dry and free of contamination. Contaminants include, but are not limited to dust, oil, moisture, sap, lint, and sanding debris. Do not use paper towels, dirty rags, contaminated sandpaper, or touch surfaces with oily fingers. Sand as needed and clean off sanding debris. Wipe surfaces down with a clean cotton t-shirt rag soaked in an oil free solvent like denatured alcohol or acetone prior to applying epoxy seal coat. Do not use tack cloth.

STEP POURING: The maximum casting depth of Dura Clear Epoxy is roughly 0.5"-1" per pour, but deeper castings can be achieved by step pouring multiple layers. Each layer MUST be allowed to cool to room temperature (25-30 °C) before adding additional layers. Once cooled, you can pour the next layer without additional surface prep all the way up until you can no longer indent a finger-nail into the previous coat. No sanding necessary. Warmer temperatures will set faster, and cooler temperatures will set slower. Large batches of mixed epoxy will also cure much more quickly than small batches. If allowed to cure past the point of being able to indent a fingernail, then you will want to lightly scuff sand between coats to promote adhesion. As a general rule, if you can sand, you should. Working time: Dura Clear is a mass and temperature sensitive material. The gel time (time it takes the mixed epoxy resin and hardener to initially harden up) can vary drastically depending on any number of factors such as mixing mass, material temp, ambient temp, mixing time, speed of mixing, speed of application, casting and coating thickness, etc. Dura Clear Epoxy has a 5.5 hour gel time at 22°C in a 150 gram mass, but will set up much faster if warmer or left sitting for an extended time in a larger mass. The more you mix up, and the warmer it is, the faster it will gel. That being said, 10-15 minutes is all it should take to carefully mix and pour. If the mixed epoxy starts to heat up in your mixing bucket, apply immediately.

CURE TIME: Dura Clear Epoxy in a 0.5"-1" thick casting at 22 °C should be tack free in roughly 4-8 hrs, sandable after 12-24 hrs, and fully cured in 5-7 days. Keep in mind that epoxy is mass and temperature sensitive. Thin castings and cooler working conditions will cure slower, and thick castings and hotter working conditions will cure faster.

PACKING

5 KG SET - 20 KG SET

SHELF LIFE

12 MONTHS IN DRY AND SOFT CLIMATE CONDITION

CONSUMPTION

1,2 kg/mm/m²