



PACE TECHNOLOGIES

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POLYCAST Clear Casting Resin (Product Data Sheet)

Description: POLYCAST Casting Resin is a water-clear casting resin designed for applications in which extreme clarity and absence of color when cured are required. Suggested applications include castings metallographic samples, object for display and biological encapsulations. POLYCAST resin is a low-viscosity, low reactivity, orthophthalic polyester. It is prepromoted for curing with various methyl ethyl ketone peroxides (MEKPs) (POLYCAST Hardener).

Features:

- Low shrinkage
- Low viscosity
- U-V stabilized
- Specially promoted Resists yellowing

Benefits:

- Minimal warping
- Outstanding air release
- Meets California rule 50 and SCAQMD 1162
- Water white when cured
- Designed for small or large castings

Typical Liquid Specifications @ 25°C

Weight per gallon (lbs)	Viscosity* CPS	Thx Index Minutes	Gel Time (minutes)	Total Time to Peak Temp. (minutes)	Peak Exotherm (°F)
9.17-9.33	450-600	N/A	14-20	35-65	260-300

***Brookfield LVF #2 @60**

Typical Mechanical Properties

Characteristic	Test Method	1/8" Clear Casting
Barcol Hardness	D-2583-75	37
Heat Deflection Temp. (°F)/°C	D-648	(160)/171
Flexural Strength, psi	D-790	12,000
Flexural Modulus, x 10 ⁵ , psi	D-790	Not available
Tensile Strength, psi	D638	10,000
Tensile Modulus, x 10 ⁵ psi	D-638	Not available
Tensile Elongation @Break, %	D-638	Not available



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Storage: Keep away from ignition sources: flames, pilot lights, electrical sparks, and sparking tools. NO SMOKING. Do not store in direct sunlight. Store separate from oxidizing materials, peroxides, and metal salts. Keep container closed when not in use. To ensure maximum stability and maintain optimum **resin** properties, resins should be stored in closed containers at temperature below 75°F (25°C). Copper or copper containing alloys should be avoided as containers. Inventory levels should be kept to a reasonable minimum with first-in, first-out stock rotation.

Safety: NEVER ADD SALTS (PROMOTERS) OR PROMOTED RESINS TO A PEROXIDE. When adding peroxides to a **resin** solution, promptly and thoroughly mix the resulting product. Never add organic peroxides to a hot diluent or process. Prevent contamination with foreign materials, including without limitation, accelerators or promoters (such as dimethyl aniline, other amines, and cobalt compounds), heavy-metal oxides or salts (particularly those of cobalt, iron, and copper), strong acids, and sanding dusts. Use containers made of glass, polypropylene, Teflon, polyethylene, or ceramic to prevent contamination of this material during its handling.

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