

IPRTM

Isophthalic Polyester Resin



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

CTech-LLC[®] IPRTM is a thixotropic, corrosion and temperature resistant isophthalic polyester resin. The IPRTM isophthalic polyester resin is formulated for hand lay-up and spray-up applications. The thixotropic nature of the resin allows application on vertical parts without the risk of sagging or drainage.

TECHNICAL DATA

	Unit	IPR TM
Viscosity	CPS	450-650
Specific Gravity	gm/cc	1.04-1.08
BarWeight	% NV	50-53
Shelf Life	month	12

TYPICAL CURING CHARACTERISTICS

	Unit	IPR TM
Gel Time at 77° F	min	13.5 - 16.5
Time to Peak at 77°F	CPS	24 - 31
Peak Exotherm °F	-	330 - 360

* Catalyzed at 1.25% by weight with MEKP

PROPERTY OF CURED

	Unit	1/8" Clear Casting
Barcol Hardness	-	40
Heat Deflection Temperature	°F (°C)	225 (107.2)
Flexural Strength @ 77°F	psi	16,600
Flexural Modulus @ 77°F	x 10 ⁶ psi	0.52
Tensile Strength @ 77°F	psi	9,300
Tensile Modulus @ 77°F	x 106 psi	0.59
Tensile Elongation @ Break	%	2.4
Compressive Strength @ 77°F	psi	N/A

ADVANTAGES

- High molecular weight isophthalic polymer
- Good corrosion resistance
- Good physical strength properties

- Excellent wet-out and room temperature cure properties
- Contains no esterification catalyst for improved hydrolytic stability

TYPICAL USES

IPRTM Iso Polyester is perfect for making dimensionally stable polyester molds, corrosive service part fabrication, and as a durable repair material for tank linings.

INSTALLATION PROCEDURE

Mixing

- Shake well before using. To initiate hardening add MEKP Hardener in a ratio of 1.25%.
- At a temperature of 22°C the resin will begin to harden in about 24 minutes and be sandable in about 6 hours. Full cure will take at least 48 hours.
- At cooler temperatures the mixture will take longer to harden and at warmer temperatures it will take less time.
- The ratio of hardener may be adjusted to compensate for temperature extremes. Add up to 50% more hardener when cooler temperatures exist and correspondingly less when warmer.

APPLICATION

Laminating Application

- Resins can be applied to fiberglass or synthetic reinforcements with a brush, squeegee, or short nap paint roller.
- Thick laminations can be rolled out with a grooved Saturation Roller.

- A properly applied fiberglass laminate will be uniformly translucent (assuming no pigmentation of the resin) without a glossy or smooth surface.
- A “milky” appearance indicates insufficient resin.
- A glossy, smooth surface indicates too much resin.
- When using multiple layers of reinforcement, it is not necessary to wait for one layer to cure before applying the next layer.

STORAGE & SHELF LIFE

- To ensure maximum stability and maintain optimum properties, IPR™ isophthalic polyester resin should be stored in closed containers, maintained below 25°C and away from heat sources and sunlight.
- shelf life: 12 months unopened.

CTech-LLC[®]

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IMPORTANT NOTE:

Before using any CTech-LLC[®] product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

WARANTY:

CTech-LLC[®] warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the date of purchase. CTech-LLC[®] shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.