



TAP Plastics High-Strength Isophthalic Polyester Resin

Type • A corrosion grade iso polyester designed for ambient temperature gel and cure. It has been specifically formulated and promoted for use in spray-up or wet lay-up processes. It is thixotropic for non-draining on vertical surfaces. It has exceptional physical strength properties, excellent handling characteristics, and outstanding heat and corrosion resistance.

Recommended Use • Applications include tanks, pipes, tooling, and hundreds of others requiring high-strength retention, corrosion-resistance, and durability.

High-Strength Isophthalic Resin complies with FDA Title 21 CFR 177.2420 and can be used for food contact applications when properly formulated and cured. Please note that it is the responsibility of the manufacturer of composite products to ensure that all relevant FDA requirements are fulfilled. Laminates can meet Mil-R-7575C Grade A & B Class 0+3 electrical properties, approved for use in military applications.

Typical Liquid Properties @77°F (25°C)

Color	cobalt blue
Monomer Content,	47.5%
Viscosity	500-700 cps
Thixotropic Index	2.0
Gel Time	13-17 minutes
Total Time to Peak	24-31 minutes
Peak Exotherm	345°F
Storage Stability (from code date)	6 months
Non-Volatile	54.0%
Specific Gravity	1.07
Pounds per Gallon	8.9

Properties 1/8" Clear Casting

Barcol Hardness	D-2583	40
Heat of Election Temp	D-648	225°F
Flexural Strength (77°F)	D-790	16,600 psi
Tensile Strength (77°F)	D-638	9,300 psi
Tensile Elongation (77°F)	D-638	2.4%

Laminate Performance at Elevated Temperatures

	@ 77°F	@ 150°F	@ 200°F	@ 250°F	@ 300°F
Flexural Strength, psi	31,000	28,600	24,000	14,700	4,300
Flexural Modulus, psi x 10 ⁶	1.38	1.20	0.85	0.50	0.30
Tensile Strength, psi	19,900	22,500	25,000	17,000	13,200
Tensile Modulus, psi x 10 ⁶	1.63	1.51	1.38	0.87	0.87

Note: Mat Laminate: 4 ply, 1.5 oz mat, 1/8" thick.

Disclaimer and Limitation of Liability

Properties reported are typical of those obtained in controlled laboratory tests and are provided as guidelines. The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. We warrant that our products will meet our written specifications. Nothing herein shall constitute any other warranty expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.