



PPT-201-15

DESCRIPTION:

General purpose pre-promoted and thixotropic laminating resin. It has good wet-out to fiberglass; moderated exotherm, fast hardness development and good mechanical properties on finished parts.

USES:

Formulated for make fiberglass parts by hand-lay up or spray-up process.

TYPICAL LIQUID PROPERTIES:

Next values are for a reference guide only. Certain batches will not conform exactly to these numbers due to: storage conditions, temperature changes, batch age, test equipment and procedures; these

variables may affect deeply the evaluation results. Products with values outside of these numbers can perform acceptably. Final suitability of product is in the end use performance.

Test	Minimum Value	Maximum Value	Test Method
Non-Volatile Content (%)	Report	Report	TARQ-200
Acid Number (solution)	--	30	TARQ-100
Brookfield Viscosity (cps) ²	300	450	TARQ-300
Thixotropic Index ³	2	--	TARQ-300
Gel Time (minutes) ¹	15	20	TARQ-400
Cure Time (minutes) ¹	Report	Report	TARQ-400
Exothermic Peak (°C) ¹	Report	Report	TARQ-400
Stability @ 120°C (hours)	1.5	--	TARQ-660
Appearance	Cloudy	Cloudy	Visual

¹ 1% Butanox M-50 @ 25°C

² RVT, spindle # 3, 50 rpm @ 25°C

³ RVT, spindle # 3, 5 rpm / 50 rpm @ 25°C

CURE:

It is recommended that gel time be tested in the customer's plant, due to age, temperature, humidity and catalyst type / amount, will produce varied gel times.

The catalyst level should not exceed 2.4% or fall below 1% for proper cure.

This product will have use difficulty when temperature fall below 16°C, due to curing may be adversely affected. All the gel and cure times are related to Butanox M-50 as catalyst. If any doubt, please contact our Technical Service Department.

PHYSICAL PROPERTIES:

Polyester resin do not develop ultimate physicals, i.e. "cure" right away. Time and / or heat are needed. Heat may come from internal exotherm or external sources. The amount of catalyst will affect the cure. With time and / or heat, a "moderate cure" will develop into "ultimate physicals".

When the part reaches ultimate cure depends upon time, temperature and satisfactory catalyzaion. Too

much or too little catalyst can result in permanent under-cure, wich cannot be overcome.

Practically speaking, serviceable cure time will range from overnight to a week, and occasionally longer due to circumstances. Small and thickness laminates, properly catalyzed without exotherm or external heat can be delay months or years to get their last physical properties. Sufficient external heat can reduce the cure time to less than one day.

Test	Value
Tensile Strength (psi)	18,332
Tensile Modulus (psi x 10 ⁶)	1.501
Elongation (%)	0.36
Flexural Strength (psi)	33,652
Flexural Modulus (psi x 10 ⁶)	1.302
HDT at 1.82 MPa (°C) ¹	81.0
Barcol Hardness (934-1)	46

Laminate with 30% of fiberglass; post-cure schedule: 12 hrs at RT + 5 hr @ 65°C
¹ clear casting

CAUTIONS:

Do not use air to mix, because it is not effective and moreover can produce contamination with water and oil. Do not add any material than the recommended fillers and catalyst for this product. If any doubt, please contact our Technical Service Department.

Warning: Avoid direct mixing of organic peroxide with metallic soaps, amines or any type of accelerator or promotor, because it can result on violent decomposition with fire or explosion.

STORAGE LIMITATIONS:

Uncatalyzed unsaturated polyester have a usage life of six months from date of manufacture when stored at 25°C or below, in a closed, factory-sealed,

opaque container and out of direct sunlight, heat sources or moisture. By each 7°C increment on temperature, usage life decrease to half.

SHIPPING:

Metallic, closed and sealed drums of 230 Kg or tank-wagons.



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Last Revision: Oct/29/2013

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