PRODUCT BULLETIN
March 2020

Polynt A 6133 TAE

Low Profile, Styrene Suppressed Marine Laminating Resin

DESCRIPTION

Polynt A 6133 TAE is a promoted, thixotropic, low profile, styrene suppressed, marine grade, unsaturated polyester laminating resin. Polynt A 6133 TAE resin is formulated for ambient curing with methyl ethyl ketone peroxide (MEKP) initiators for marine or general purpose hand lay-up or spray-up applications where compliance with SCAQMD Rule 1162 type emission standards are desired.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Complies with Rule 1162 and Regulation 8: Rule 50 for Polyester Resin Operations with less than 35% monomer (by weight)
- Quick turnover of parts and ease of handling due to rapid wetting of reinforcements and low air entrapment
- Minimal print-through of reinforcement materials and improved cosmetics due to low post-cure tendencies
- Fast Barcol development in thin cross-section laminates due to rapid rate of cure
- Resists impact, thermal, and demolding cracking
- Versatile and suitable for hand lay-up or spray-up applications
- Maintains mechanical properties at high temperatures due to high HDT

PROPERTIES – LIQUID

Property(1)	Unit	Polynt A 6133 TAE
Appearance	-	Pink
NVM-SPI	%	65.5
Acid Number	mg KOH/g	15
Viscosity	cps	450(2)
Thix Index	-	3.05
Gel Time	minutes	18(3)
Gel to Peak	minutes	9.0
Peak Exotherm	°C/°F	180/356
Specific Gravity	-	1.10
Flash Point (Seta Closed Cup)	°C/°F	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RV#2 @ 50 RPM
3) 1.25% MEKP-925

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PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Laminate[3]	Test Method
Tensile Strength	psi	7,000	18,000	ASTM D 638
Tensile Modulus	psi	470,000	1,300,000	ASTM D 638
Tensile Elongation	%	1.7	2.5	ASTM D 638
Flexure Strength	psi	15,000	38,000	ASTM D 790
Flexure Modulus	psi	530,000	1,600,000	ASTM D 790
Compression Strength	psi	17,000	23,000	ASTM D 695
Heat Deflection Temperature	°C/°F	80/176	-	ASTM D 648
Hardness, Barcol Model 934-1	HB	38	56	ASTM D 2583
Water Absorption				
- 2 hours at 212°F	% gain	0.83	0.39	ASTM D 570
- 24 hours at 73°F	% gain	0.17	0.10	

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) Initiator type and ratio: DDM-9 @ 1.5%; Cure conditions: 16 hrs. @ 73°F; Post-cure conditions: 2 hrs. @ 150°F , 2 hrs. @ 250°F
3) Laminate Construction: 4 ply 1.5 oz/sq. ft Chopped Strand Mat; Glass Content: 30%; Thickness: 0.15" nominal; Initiator type and ratio: DDM-9 @ 1.5%; Cure conditions: 16 hrs. @ 73°F; Post-cure conditions: 4 hrs. @ 150°F

APPLICATION

Each user must determine the suitability of this product to his/her particular mode of operation and intended end-use application. A Polynt representative will be available to assist in the proper selection of all Polynt-Reichhold products available for commercial use.

SHELF LIFE & STORAGE

The shelf life of Polynt A 6133 TAE resin is 120 days from the date of manufacture from Polynt. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.