PRODUCT BULLETIN

October 2025

POLYLITE® 33282 Series

Marine Grade Infusion Resin

DESCRIPTION

POLYLITE® 33282 Series are promoted, low profile, marine-grade unsaturated polyester infusion resins. POLYLITE® 33282 Series are formulated for ambient curing with methyl ethyl ketone peroxides (MEKP) or cumene hydroperoxides (CHP) in marine or general purpose closed mold processes such as vacuum infusion, SCRIMP, RTM, or RTM light.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Minimal print-through of reinforcement materials and improved cosmetics due to reduced shrinkage and low post-cure tendencies
- Quick turnover of parts and ease of handling due to rapid wetting of reinforcements, low air entrapment, and low viscosity
- Reduced air emissions, complies with Rule 1162 and Regulation 8: Rule 50 for Polyester Resin Operations due to less than 35% styrene (by weight)
- Resists impact, thermal, and demolding cracking

PROPERTIES – LIQUID

Property(1)	Unit	33282-07	33282-20	33282-25
Appearance	-	Blue-Amber	Blue-Amber	Blue-Amber
NVM	%	66	64	66
Viscosity(2)	cps	170	123	150
Gel Time	minutes	33(3)	70(4)	33(5)
Gel to Peak	minutes	26	35	23
Peak Exotherm	°C/°F	144/291	120/248	145/293
Specific Gravity	g/cm^3	1.10	1.10	1.10

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LV Spindle #2 at 60 RPM
3) 1.5 cc Nouryon® Trig 178 per 100.0 g resin
4) 2.0 g Nouryon® Trig 178 per 100.0 g resin
5) 1.5 g Arkema Luperox® CAT 11 per 100.0 g resin in air with Tecam timer

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PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Test Method
Tensile Strength	psi	7,000	ASTM D 638
Tensile Modulus	psi	550,000	ASTM D 638
Tensile Elongation	%	1.5	ASTM D 638
Flexure Strength	psi	16,000	ASTM D 790
Flexure Modulus	psi	580,000	ASTM D 790
Compression Strength	psi	15,000	ASTM D 695
Heat Deflection Temperature	°C/°F	72/162	ASTM D 648
Hardness, Barcol Model 934-1	HB	42	ASTM D 2583
Water Absorption - 2 hours at 212°F - 24 hours at 73°F	 % gain % gain	 0.85 0.17	ASTM D 570
Izod Impact -Type "E"	ft-lb/in	2.67	ASTM D 256

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) Initiator type and ratio: 1.25 cc Arkema Luperox® DDM-9 per 100.0 g resin; Cure conditions: 16 hrs. @ 73°F; Post-cure conditions: 2 hrs. @ 150°F, 2 hrs. @ 250°F

APPLICATION

This resin can be used with MEKP/CHP blends as well as straight MEKP initiators.

Initiator Type	Amount	Gel Time	Gel to Peak Time	Peak Exotherm
Cat11	1.5 g	60 min.	35 min.	120°C/248°F
DDM-9	1.5 g	48 min.	15 min.	141°C/285°F

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. 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 products available for commercial use.

SHELF LIFE & STORAGE

The shelf life of POLYLITE® 33282 Series 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.