PRODUCT BULLETIN

October 2018

POLYLITE® 33348 Series

Fillable General Purpose Lamination Resin

DESCRIPTION

POLYLITE® 33348 Series of resins are low-viscosity, thixotropic resins that are pre-promoted to gel and cure at room temperature with the addition of a methyl ethyl ketone peroxide (MEKP) initiator. POLYLITE® 33348 resins were developed for laminating applications that require the addition of specific carbonate, hydrate, or sulfate-type fillers.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Resists sagging on vertical surfaces and drainage from reinforcements due to thixotropic properties
- Accepts certain fillers at levels up to 64%, minimizes voids and/or resin starved areas, easily maintains desired resin-to-glass ratio, and improves turnover and fabrication time due to low viscosity and rapid wet-out of reinforcements
- Rapid Barcol development in thin laminates and fast demold times due to quick cure time
- Versatile and suitable for spray-up or hand lay-up; suitable for gel coat tub, shower, and truck cabs; can be used as an acrylic or ABS *back-up* laminating resin

PROPERTIES – LIQUID

Property(1)	Unit	33348-01	33348-02	33348-03	33348-06	33348-09
Appearance	-	Amber	Amber	Amber	Amber	Amber
Viscosity	cps	2,250(2)	2,250(2)	2,200(3)	1,550(4)	1,200(5)
Thix Index	-	(4.0 Min.)	(4.0 Min.)	(2.7 Min.)	3.0 (Min.)	2.75 (Min.)
Gel Time	minutes	12(2)(6)	14(2)(6)	6(3)(6)	8(4)(7)	8(5)(6)
Gel to Peak	minutes	9	10	8	12.5	8
Peak Exotherm	°C/°F	110/230	110/230	110/230	105/221	118/244

1) All properties at 25°C/77°F unless otherwise noted
2) Filled 62% $CaSO_4$, mix at 32.2°C / gel 1.50 cc MEKP 925/100 g resin mix / LV#4 @ 60 rpm
3) Filled 64% $CaSO_4$, mix at 29.4°C / gel 1.50 g MEKP 925/100 g resin mix / RV#4 @ 50 rpm
4) Filled 56.7% Valufil 650 mix at 90°F / gel 1.50 g MEKP-9H/100 g resin mix or neat / RV #4 @ 20 rpm
5) Filled 60% $CaSO_4$, mix at 29.4°C / gel 1.75 cc CADOX M50a/100 g resin mix / RV#4 @ 50 rpm
6) 1.25% MEKP-9. Cured over night at room temperature. Post cured 2 hrs. @ 65.5°C (150°F) then 2 hrs. @ 121°C (250°F)
7) 1.5% MEKP-9H

PROPERTIES – LIQUID (Continued)

Property[5]	Unit	33348-11	33348-16	33348-20	33348-36
Appearance	-	Amber	Green (pigment)	Blue	Blue
Viscosity	cps	2,400[9]	750[10]	925[11]	1,300[10]
Thix Index	-	2.5 (Min.)	3.0 (Min.)	3.0 (Min.)	3.0 (Min.)
Gel Time	minutes	8	9	14	37
Gel to Peak	minutes	9	8	15	32
Peak Exotherm	°C/°F	101/214	128/262	116/241	98/208

8) All properties at 25°C/77°F unless otherwise noted
9) Filled 58% PMC-SP gel 1.50 g MEKP-9H/100 g resin filled or neat / mix at 90°F / RV #3 @ 20 rpm
10) Filled 50% $CaCO_3$, mix at 25.0°C / gel 1.50 g DDM-9 /100 g resin mix run in water bath 25°C / RV#3 @ 50 rpm
11) Filled 50% $CaSO_4$, mix at 25.0°C / gel 1.50 cc DDM-9 /100 g resin mix run in water bath 25°C / LV#3 @ 60 rpm

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Test Method
Tensile Strength	psi	5,000	ASTM D 638
Tensile Modulus	psi	592,000	ASTM D 638
Tensile Elongation	%	1.0	ASTM D 638
Flexure Strength	psi	9,000	ASTM D 790
Flexure Modulus	psi	552,000	ASTM D 790
Compression Strength	psi	18,000	ASTM D 695
Heat Deflection Temperature	°C/°F	83/181	ASTM D 648
Hardness, Barcol Model 934-1	HB	35	ASTM D 2583
Water Absorption - 2 hours at 212°F - 24 hours at 73°F	 % gain % gain	 0.7174 0.1266	ASTM D 570

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) Initiator type and ratio: 1.25% MEKP-9; Cure conditions: cured over night at room temperature; Post-cure conditions: 2 hrs. @ 65.5°C (150°F) then 2 hrs. @ 121°C (250°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 POLYLITE® 33348 Series is 3 months from the date of shipment 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.