PRODUCT BULLETIN

December 2018

# POLYLITE® 33087 Series

## General Purpose Polyester Laminating Resins

## DESCRIPTION

POLYLITE® 33087 is a series of general purpose laminating resins designed for use in fabricating FRP articles using either hand lay-up or spray-up processes. These orthophthalic polyester resins are thixotropic, low viscosity, and formulated for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP).

## BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Resistant to sagging on vertical surfaces and resistant to draining around reinforcements due to thixotropic properties
- Consistent gel and cure times at various initiator levels due to stable gel time
- Versatile and suitable for use in hand lay-up or spray-up processes

## PROPERTIES – LIQUID

| Property[1] | Unit | 33087-00 | 33087-17 |
|---|---|---|---|
| Appearance | - | Amber-Brown/Opaque | Amber-Brown/Opaque |
| NVM | % | 55.5 | 55.5 |
| Viscosity[2] | cps | 450 | 600 |
| Thix Index | - | 3.40 | 3.20 |
| Gel Time | minutes | 21.0[3] | 25.0[4] |
| Gel to Peak | minutes | - | 14.0 |
| Peak Exotherm | °C/°F | 149/302 | 147/300 |
| Specific Gravity | - | 1.10 | 1.09 |
| Flash Point (Seta Closed Cup) | °C/°F | 32/89 | 32/89 |

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LVF Spindle #3 at 60 RPM
3) 1.25% by volume Superox® 46709 per 100 g of resin
4) 1.00% by weight Cadox M50a per 100 g of resin

## PROPERTIES – PHYSICAL

| Property[1] | Unit | Neat Resin Casting | Test Method |
|---|---|---|---|
| Tensile Strength | psi | 10,000 | ASTM D 638 |
| Tensile Modulus | psi | 610,000 | ASTM D 638 |
| Tensile Elongation | % | 1.8 | ASTM D 638 |
| Flexure Strength | psi | 16,000 | ASTM D 790 |
| Flexure Modulus | psi | 590,000 | ASTM D 790 |
| Compression Strength | psi | 14,000 | ASTM D 695 |
| Heat Deflection Temperature | °C/°F | 75/167 | ASTM D 648 |
| Hardness, Barcol Model 934-1 | HB | 50 | ASTM D 2583 |
| Water Absorption<br>- 2 hours at 212°F<br>- 24 hours at 73°F | <br>% gain<br>% gain | <br>0.93<br>0.16 | ASTM D 570 |

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.

## 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® 33087 Series resins 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.