PRODUCT BULLETIN

July 2023

170-0026 Series

Vinyl Ester Laminating Resins

DESCRIPTION

170-0026 Series resins are pre-promoted, thixotropic, vinyl ester resins designed for use in many laminating applications that require superior toughness and fatigue resistance. The composition of 170-0026 resins comply with FDA regulation CFR 177.2420. When properly formulated and cured, these resins can be used to fabricate equipment intended for repeated contact with food. Suggested applications include marine, pools and spas, barrier coats, and acrylic adhesion.

BENEFITS & FEATURES

- Excellent mechanical properties
- Water resistance
- Chemical and corrosion resistance
- Low HAPs

PROPERTIES – LIQUID

Property[1]	Unit	170-0026	170-0026-15	170-0026-18	170-0026-22	170-0026-22EX
Viscosity[2]	cps	480	580	580	580	580
Thix Index	-	2.8	3.2 (Min.)	3.2 (Min.)	3.2 (Min.)	3.7
Gel Time[3]	minutes	18	15	18	21	21
Gel to Peak	minutes	13	13	13	13	13
Peak Exotherm	°C/°F	171/340	168/335	168/335	168/335	168/335
Weight per Gallon	lbs/gal	8.6	8.625	8.625	8.625	8.625
Styrene Content	%	42	43 (Max.)	43 (Max.)	43 (Max.)	43 (Max.)

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RVT Spindle # 3 at 50 RPM
3) Brookfield Viscometer RVT Spindle #3 at 5/50 RPM
4) 1.25% United Initiators Norox® MEKP-925

PROPERTIES – LIQUID

Property[1]	Unit	170-0026-25	170-0026-30	170-0026-35	170-0026-40
Viscosity[2]	cps	580	580	580	580
Thix Index	-	3.2 (Min.)	2.8	3.2 (Min.)	3.2 (Min.)
Gel Time[3]	minutes	25	30	35	40
Gel to Peak	minutes	-	16	-	19
Peak Exotherm	°C/°F	168/335	168/335	168/335	168/335
Weight per Gallon	lbs/gal	8.625	8.625	8.625	8.625
Styrene Content	%	43 (Max.)	43 (Max.)	43 (Max.)	43 (Max.)

5) All properties at 25°C/77°F unless otherwise noted
6) Brookfield Viscometer RVT Spindle # 3 at 50 RPM
7) Brookfield Viscometer RVT Spindle #3 at 5/50 RPM
8) 1.25% United Initiators Norox® MEKP-925

PROPERTIES – PHYSICAL

Property[1]	Unit	0.125" Casting MEKP-925	Test Method
Tensile Strength	psi	12,000	ASTM D 638
Tensile Modulus	psi	489,000	ASTM D 638
Tensile Elongation	%	5.0	ASTM D 638
Flexure Strength	psi	21,000	ASTM D 790
Flexure Modulus	psi	525,000	ASTM D 790
Heat Deflection Temperature	°C/°F	110/230	ASTM D 648
Hardness, Barcol Model 934-1	HB	33	ASTM D 2583

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

APPLICATION

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 170-0026 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.