PRODUCT BULLETIN

January 2024

784-6641

Corrosion-Resistant Vinyl Ester Resin

DESCRIPTION

784-6641 resins are pre-promoted, thixotropic vinyl ester resins designed for use in many laminating applications that require superior toughness and fatigue resistance. These resins contain less than 35% styrene for lower styrene emissions, and it has superior mechanicals compared to standard general purpose and isophthalic resins. When properly formulated and cured, 784-6641 resins can be used for applications that comply with FDA regulation 21 CFR 177.2420 for equipment intended for repeated contact with food. Suggested applications include marine, pools and spas, barrier coats, acrylic adhesion, and transportation.

BENEFITS & FEATURES

- Excellent mechanical properties
- Water resistance
- Chemical and corrosion resistance
- Reduced styrene emissions
- Less than 35% HAPs content

PROPERTIES – LIQUID

Property(1)	Unit	784-6641-14	784-6641-22
Appearance	-	Purple	Purple
NVM	%	60	60
Viscosity(2)	cps	650	650
Thix Index(3)	-	2.5	2.5
Gel Time(4)	minutes	14	22
Gel to Peak	minutes	9	-
Peak Exotherm	°C/°F	177/350	168/335
Weight per Gallon	lbs/gal	8.65	8.60
Styrene Content	%	33	33

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) 1.5% United Initiators Norox® MEKP-925

PROPERTIES – PHYSICAL

Property[1]	Unit	0.125" Cured Unfilled Castings	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 784-6641 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.