PRODUCT BULLETIN

November 2018

STYPOL®

040-3778, 040-3796

Low Profile Laminating Resins

DESCRIPTION

STYPOL® 040-3778, and 040-3796 are low profile laminating resins and are ideal where excellent profile is desired and where a single resin system is needed. This series is designed for open mold processes where hand lay-up and spray-up applications are used with neat resin.

STYPOL® 040-3778, and 040-3796 resins meet the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production. These resins also meet the EPA NESHAP for Boat Manufacturing and California's SCAQMD Rule 1162: A-C, G-I, and L.

BENEFITS & FEATURES

- Superior surface cosmetics due to minimal shrinkage
- Resistance to fiberglass pattern print-through
- High heat distortion temperature equals reduced post-cure on finished parts
- Good reactivity
- Rapid wet-out

PROPERTIES – LIQUID

Property[1]	Unit	040-3778	040-3796
Viscosity	cps	475[2]	475[4]
Thix Index	-	2.75[3]	2.8[5]
Gel Time[6]	minutes	22	27
Gel to Peak	minutes	10	10
Peak Exotherm	°C/°F	176/348	176/348
Peak Exotherm Laminate	minutes	49/120[6][7]	45/113[6][7]
Laminate 20 Barcol	hours	2.25	2.5

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RVT Spindle #2 at 50 RPM
3) Brookfield Viscometer RVT Spindle #2 at 5/50 RPM
4) Brookfield Viscometer LV Spindle # 3 at 60 RPM
5) Brookfield Viscometer LVT Spindle #3 at 6/60 RPM
6) 1.50% DDM-9
7) 1.5% DDM-9; Laminate Construction: glass 2 plies 2 oz. mat, 30% glass content

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Laminate[3]	Test Method
Tensile Strength	psi	7,000	12,000	ASTM D 638
Tensile Modulus	psi	630,000	1,300,000	ASTM D 638
Tensile Elongation	%	NA	1.4	ASTM D 638
Flexure Strength	psi	10,000	20,000	ASTM D 790
Flexure Modulus	psi	600,000	1,020,000	ASTM D 790
Heat Distortion Point at 264 psi	°C/°F	85/185	NA	ASTM D 648
Hardness, Barcol Model 934-1	HB	40	45	ASTM D 2583

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 STYPOL® 040-3778, and 040-3796 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.