

Fiberlay P-17 ISO Polyester Resin



P-17

Description:

Orca 301 is an ISO, thixotropic, polyester resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 301 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 301 is designed to be used with both the spray-up and hand lay application technique.

Features:

- Extremely fast wet out and roll out
- Good adhesion with gel coat
- Good impregnation
- Moderate trim time
- High strength
- Corrosive resistance

Uses:

- Yacht/Boat Construction
- Manufactured parts
- Spray up process
- Hand Lay-up application

TYPICAL PROPERTIES *1

Uncured Resin

<u>Test</u>	<u>Value</u>
Viscosity, 77°F	400-450cps
Specific Gravity, 77°F / 77°F	1.1
Curing Property, 77°F	1% MEKP 9% active ORCA S980
Gel Time 77° F	Varies
Time to Peak	Varies
Thix Index	2.2-2.6
Peak Exothermic Temp.	140°F-194°F

*1 Values are representative. Specification limits are available upon request

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Cured Resin *2

<u>Test</u>	<u>Value</u>
Tensile Strength	8,532 psi
Flexural Strength	16,637 psi
Flexural Modulus	597,215 psi
Tensile Modulus	455,021 psi
Barcol Hardness, 934-1	48
Elongation	1.7%
Heat Dist. Temp.	185°F-203°F

Laminated Physical Properties *3

<u>Test</u>	<u>Value</u>
Tensile Strength	16,352 psi
Flexural Strength	25,168 psi
Flexural Modulus	1,208,650 psi
Tensile Modulus	1,109,114 psi
Elongation	1.4%

* 2. Thickness : 3 mm
After Cure: 176°F x 2hrs, 248°F x 2hrs

* 3. #450 Chopped Strand Mat 3 plies
Glass Content: 33 %
After Cure : 176°F x 2hrs, 248°F x 2 hrs

Handling & Storage

As with all polyester resin, rate and degree of cure are a function of initiator concentration and of temperature. Resin and work area should be between 70°F and 95°F to ensure satisfactory results. Initiator levels should be within a range of 1.0-2.2% based on weight of resin. The use of initiator levels outside of this range may result in an inadequate cure, with laminates exhibiting moderate to severe post cure after demolding.

Fiberlay P-17 is available in Pints, Quarts, Gallons, 5-Gallon Pails and 55-Gallon drums.

To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 75°F and a way from heat sources and sunlight. All storage areas and containers should conform to local fire and building codes. Drum stock should be stored away from all sources of flame or combustion. Inventory levels should be kept to a reasonable min with first-in, first-out stock rotation.

Safety

Read and understand the Material Safety Data Sheet before working with this product

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