

Orca



omposites

516

Description:

Orca 516 is a Low styrene V/E blend, thixotropic, non-waxed resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 516 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 516 is designed to be used with both the spray-up and hand lay application technique. Orca 516 can also be used in the RTM process.

Features:

- Extremely fast wet out and Roll out
- Good Mechanical Strength
- Low styrene emission
- High Impact Strength
- Superior Adhesion Property

Uses:

- Yacht/Boat Construction/Blister Repair
- Manufactured parts
- Spray up process
- Hand Lay-up application
- Mold Making

TYPICAL PROPERTIES*1

Uncured Resin

Test

Viscosity, 77°F

Specific Gravity, 77°F

Curing Property, 77°F

Gel Time, 77°F

Time to Peak

Peak Exothermic Temp.

Value

Varies

1.08

1% MEKP 9% active Orca 981

Varies

Varies

Varies

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Orca 516 LS V/E Blend Resin

Cured Resin*2

<u>Test</u>	<u>Value</u>
Tensile Modulus	302,519 psi
Tensile Strength	10,824 psi
Flexural Strength	19,340 psi
Flexural Modulus	526,443 psi
Elongation (%)	4.2%
Barcol Hardness, 934-1	42
Heat Distortion Temp.	190°F - 210°F

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

*2 Thickness: 3 mm
After Cure: 158°F × 6hrs

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Handling & Storage

As with all vinyl ester 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.

Orca 516 is available in 55-Gallon metal drums.

To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 75°F and away 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 Safety Data Sheet before working with this product

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