

Orca 515 LS V/E Blend Resin



515

Description:

Orca 515 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 515 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 515 is designed to be used with both the spray-up and hand lay application technique. Orca 515 can also be used in the RTM process.

Features:

- Extremely fast wet out and Roll out
- Good Mechanical Strength
- Low styrene emission
- High Elongation
- High Impact Strength
- Corrosive resistance
- 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

<u>Test</u>	<u>Value</u>
Viscosity, 77° F	450-500 cps
Specific Gravity, 77° F	1.06-1.1
Curing Property, 77° F	1% MEKP 9% active
Gel Time, 77° F	12-15 minutes
Time to Peak	23-38 minutes
Peak Exothermic Temp.	212-302° 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 Modulus	485,420 psi
Tensile Strength	7,381 psi
Flexural Strength	17,884 psi
Flexural Modulus	757,086psi
Elongation (%)	1.6%
Barcol Hardness, 934-1	51
Heat Distortion Temp.	177° F

Laminated Physical Properties *3

<u>Test</u>	<u>Value</u>
Tensile Modulus	1,388.132 psi
Tensile Strength	18,310 psi
Flexural Strength	24,839 psi
Flexural Modulus	1,390,971 psi

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

* 3. #450 Chopped Strand Mat 4 plies
Glass Content: 27.6 %
After Cure : 158° F × 6hrs

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 515 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 Material Safety Data Sheet before working with this product

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