Orca 250 Surfboard/Greenhouse Resin

Orca
Composites

Description:

Orca 250 is an Ortho GP, thixotropic, polyester resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 250 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 250 is designed to be used for hand lay-up, spray-up and filament winding purposes.

Features:

- Extremely fast wet out and Roll out
- Low Exotherm
- Thixotropic
- Moderate trim time
- Early development of Barcol Hardness
- Translucent. (Semi-transparency)

Uses:

- Yacht/Boat Construction
- Surfboard
- Green House Applications
- Spray up process
- Hand Lay-up application

TYPICAL PROPERTIES *[1]

Uncured Resin

Test	Value
Viscosity, 77° F	420-480 cps
Specific Gravity, 77° F / 77° F	1.0-1.2
Curing Property, 77° F	1% MEKP 9% active
Gel Time 77˚ F	16-18 minutes
Time to Peak	35-50 minutes
Peak Exothermic Temp.	133° F- 155° F

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

Cured Resin *[2]

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Test	Value
Tensile Strength	7,097psi
Flexural Strength	18,736psi
Flexural Modulus	567,743psi
Heat Distortion Temp	158° F
Barcol Hardness, 934-1	40

Laminated Physical Properties *3

Test	Value
Tensile Strength	17,316psi
Flexural Strength	29,665psi
Flexural Modulus	1,136,295psi
Tensile Modulus	1,192,403psi
Barcol Hardness, 934-1	55

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

* 3. #450 Chopped Strand Mat 2 plies
    #570 Roving Cloth 2 plies
    Glass Content: 40 %
    After Cure   : 158° F × 6hrs

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.

Orca 250 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