

## Orca 200 GP Polyester Resin



# 200

### Description:

Orca 200 is an Ortho GP, thixotropic, polyester resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 200 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 200 is designed to be used with both the spray-up and hand lay application technique.

### Features:

- Extremely fast wet out and Roll out
- Ortho
- Thixotropic
- Moderate trim time
- Early development of Barcol Hardness
- Little or no pattern transfer through gel-coat surfaces

### 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	400-500 cps
Specific Gravity, 77° F / 77° F	1.21
Curing Property, 77° F	1% MEKP 9% active ORCA 981
Gel Time 77° F	variable
Time to Peak	variable
Thix Index*1	1.7-2.2
Peak Exothermic Temp.	122° F- 158° F
Elongation	2.5%

\* 1. 6RPM/60RPM (Brookfield Viscometer)

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### Cured Resin \*2

<u>Test</u>	<u>Value</u>
Tensile Strength	11,313 psi
Flexural Strength	15,228 psi
Flexural Modulus	436,564 psi
Tensile Modulus	682,532 psi
Barcol Hardness, 934-1	45
Water Absorption	.25%

### Laminated Physical Properties \*3

<u>Test</u>	<u>Value</u>
Tensile Strength	15,954 psi
Flexural Strength	26,832 psi
Flexural Modulus	1,111,791 psi
Tensile Modulus	1,450,377 psi
Barcol Hardness, 934-1	54
Glass Content	31.5%

\* 2. Thickness : 3 mm  
After Cure: 230°F × 2hrs

\* 3. #450 Chopped Strand Mat 2 plies  
#570 Roving Cloth 2 plies  
Glass Content: 40 %  
After Cure : 104°F × 16hrs

### 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 200 is available in Pints, Quarts, Gallons pails and 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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