

## Orca 281 Low Profile/Low VOC Polyester Resin



# 281

### Description:

Orca 281 is a Low Profile, Low VOC, thixotropic, polyester resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 281 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 281 is designed to be used with both the spray-up and hand-lay application technique.

### Features:

- Extremely fast wet out and Roll out
- Reduced Post Cure
- Thixotropic
- Meets MACT requirements for low HAP resins
- Faster production rates without loss of surface profile
- Great Physical Properties

### 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	500-600 cps
Specific Gravity, 77°F	1.11
Curing Property, 77°F	1% MEKP 9% active Orca 981
Gel Time 77°F	Variable
Thix Index	3.0
Heat Dist. Temp. 77°F	200°-205°F

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

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## Cured Resin

<u>Test</u>	<u>Value</u>
Tensile Strength	9,000 psi
Flexural Strength	14,000 psi
Tensile Modulus	570,000 psi
Flexural Modulus	590,000 psi
Elongation (%)	2.0%
Barcol Hardness, 934-1	47

## **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 281 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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