



301

Description:

Orca 301 is an ISO, thixotropic, polyester resin designed for fabrication of small to large FRP parts at an ambient temperature. Orca 301 is pre-promoted for curing at room temperature with the addition of methyl ethyl ketone peroxide (MEKP) initiator. Orca 301 is designed to be used with both the spray-up and hand lay application technique.

Features:

- Extremely fast wet out and Roll out
- ISO
- Thixotropic
- Moderate trim time
- High Strength
- Corrosive resistance

Uses:

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

TYPICAL PROPERTIES *1

Uncured Resin

<u>Test</u>	<u>Value</u>
Viscosity, 77° F	500 cps
Specific Gravity, 77° F / 77° F	1.1
Curing Property, 77° F	1% MEKP 9% active
Gel Time	20 minutes
Time to Peak	35-50
Peak Exothermic Temp.	60-90

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

Cured Resin *2

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052D_ Orca 301 ISO Polyester Resin

<u>Test</u>	<u>Value</u>
Tensile Strength	12,100 psi
Flexural Strength	18,400 psi
Flexural Modulus	610,130psi
Tensile Modulus	454,195psi
Barcol Hardness, 934-1	43
Elongation(%)	2.7%

Laminated Physical Properties *3

<u>Test</u>	<u>Value</u>
Tensile Strength	Pending
Flexural Strength	Pending
Flexural Modulus	Pending
Tensile Modulus	Pending
Elongation(%)	Pending

REF: Approved by Lloyd's Register of Shipping

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

* 3. #450 Chopped Strand Mat 4 plies
Glass Content: 32 %
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 301 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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