

ORCA 140 INF/RTM Polyester Resin



140

Description:

ORCA 140 is a promoted, orthophthalic polyester resin intended for RTM and Infusion applications. The ORCA 140 is formulated to provide a complete, tack-free cure with moderate heat generation. The ORCA 140 is a versatile performer delivering a balance of toughness, excellent secondary bonding, and good surface aesthetics.

Features:

- Extremely low viscosity
- Fast cure time allowing for fast de-mold
- Low shrinkage
- High filler loading
- Ideal for infusion applications

Uses:

- Septic tanks
- Manufactured parts
- RTM, VARTM, INFUSION (VIP)

TYPICAL PROPERTIES*1

Uncured Resin

<u>Test</u>	<u>Value</u>
Viscosity, 77°F	100-200cps
Specific Gravity, 77°F	1.01-1.12
Curing Property, 77°F	1% MEKP 9% active ORCA 981
Gel Time 77°F	varies
Time to Peak	varies
Peak Exothermic Temp.	varies

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

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Cured Resin*2

<u>Test</u>	<u>Value</u>
Tensile Strength	9,246 psi
Tensile Modulus	526,118 psi
Tensile elongation (%)	1.7
Flexural Strength	17,352 psi
Flexural Modulus	611,603 psi
Barcol Hardness, 934-1	47
Heat Distortion Temp	150-180°F
Shrinkage	8.9%

*2 Thickness: 3mm
After Cure: 176°F x 2hrs, 212°F x 2hrs

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 140 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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