

ORCA 512 Epoxy Bisphenol-A Vinyl Ester



512

**Description:**

Orca 512 epoxy bisphenol-A vinyl ester resin is designed for great corrosion resistance to a wide range of acids, alkalis and hydrogen peroxides

**Features:**

- Low Viscosity (no thix)
- Good Mechanical Strength
- High Elongation
- High Impact Strength
- Corrosive resistance
- Superior Adhesion Property
- Excellent resistance to sustained heat

**Uses:**

- Corrosion resistance
- Storage Tanks
- Floors
- Pultrusion
- Filament Winding
- Flooring applications

**TYPICAL PROPERTIES \*1**

**Uncured Resin**

| <u>Test</u>            | <u>Value</u>                 |
|------------------------|------------------------------|
| Viscosity, 77°F        | 250 – 350                    |
| Specific Gravity, 77°F | 1.05                         |
| Curing Property, 77°F  | 1-2% MEKP 9% active Orca 981 |
| Gel Time, 77°F         | variable                     |
| Time to Peak           | variable                     |

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

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## Cured Resin (Casting)

| <u>Test</u>            | <u>Value</u>  |
|------------------------|---------------|
| Tensile Modulus        | 460,012 psi   |
| Tensile Strength       | 12,808 psi    |
| Flexural Strength      | 22,015 psi    |
| Flexural Modulus       | 500,062 psi   |
| Elongation (%)         | 6.2%          |
| Barcol Hardness, 934-1 | 39            |
| Heat Distortion Temp.  | 243°F - 253°F |

## Cured Resin (Laminate)

| <u>Test</u>      | <u>Value</u>  |
|------------------|---------------|
| Tensile Modulus  | 2,000,837 psi |
| Tensile Strength | 22,022 psi    |

## 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 de-molding. App 3-month shelf life.

Orca 512 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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