# **Epoxy Bisphenol-A Vinyl Ester**

**Description: GasGuard 1500** 

GasGuard 1500 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**

## **Test Value**

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

# **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

<sup>\*1</sup> Values are representative. Specification limits are available upon request.

## **Cured Resin (Laminate)**

## Test Value

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.

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.

#### FDA

The resin on this datasheet is manufactured from raw materials that are listed in the FDA regulation Title 21 CFR 177.2420. It is the fabricator's responsibility to ensure that the final composite is well cured. All composites used for FDA applications should be cured at 180°F/82°C for at least 4 hours. After post curing it should be washed with soap and water and rinsed.

## Safety

Read and understand the Safety Data Sheet before working with this product