

QuaCorr® 1001 Resin

For High Temperature, Chemical Resistant, Reinforced Plastic Equipment

Formula:..... Polymer
 CAS Registry Number: 25212-86-6

Applications

QuaCorr® 1001 resin is the furfural diluted version of QuaCorr® 1300 resin (the homopolymer of furfuryl alcohol). The resin's low viscosity makes it very pourable and gives good wetting of reinforcement fibers. The resin is water insoluble, but can be diluted in many organic solvents. The resin is a 100% reactive system and is typically cured to a thermoset with QuaCorr® 2001 catalyst, but can be cured with a variety of active or heat activated catalysts.

QuaCorr® 1001 resin is used to manufacture fiberglass reinforced plastic (FRP) or other fiber reinforced plastic equipment. QuaCorr® laminates exhibit a broad range of solvent and chemical resistance, combined with excellent physical, flame spread, and smoke development properties that are unique among FRP systems.

- Excellent resistance to most chemical media including solvents, acids, bases, and their various combinations
- Resistance to chemical attack at elevated temperatures
- Able to withstand short temperature excursions up to 400°F with little loss of mechanical properties
- Outstanding flame spread and smoke development properties for ducting, stacks, scrubbers, and other related applications
- Ease of fabrication by any of three commonly used techniques: hand lay-up, spray-up, or filament winding
- Suitability for large structures and pressure vessels

Contact Information

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Health and Safety

Appropriate personal protective equipment should be used to prevent dermal or respiratory tract exposure when handling QuaCorr® 1001 resin. QuaCorr® 1001 is very unstable when contacted with even low levels of strong acids. Uncontrollable exothermic polymerizations can occur. Dispose of in accordance with regulations. Always consult the MSDS when using QuaCorr® 1001.

| Specifications | Value |
|--|---------|
| Viscosity, cps 25 °C..... | 300-600 |
| Gel time, minutes 25 °C..... | 18-24 |
| Water, wt% maximum | 0.75 |
| Furaldehyde, wt% maximum | 24.0 |
| Total monomer content, wt% maximum | 29.0 |

| Property | Value |
|---|--------------------|
| Specific Gravity (25°C) | 1.22 |
| Viscosity, cps (25°C) | 300-600 |
| Weight, lbs/gal | 10.1 |
| Furfuryl Alcohol Content, typical | 7 |
| Color | Dark reddish brown |
| Odor | Furfural odor |
| Flash Point, °C..... | 75.6 |
| Storage Stability (25°C) | >1 year |
| Solids Yield, % unfilled | 85-90* |
| Carbon Yield, % unfilled | 45-50* |

*dependent on catalyst

Availability and Shipping

QuaCorr® 1001 resin is available in 5 gallon cans and 55 gallon steel drums. Shipped as: Toxic, liquids, organic, N.O.S., (Furfural solution), 6.1, UN2810, PG III. Label: Toxic.