Resin Technology



Fibergrate offers the widest selection of resin formulations, each specifically developed to solve the many environmental and performance requirements of this changing world. From greener technologies to products that offer unique smoke, corrosion resistance or fire performance characteristics – only Fibergrate has the knowledge and experience to provide these unique products.







Phenolic Resin with Low Smoke and Flame Spread

FGI-AM[®] Resin with Antimicrobial Properties

Super Vi-Corr[®] Resin for Highly Corrosive Environments

Pultruded Product Resins

ISOFR: Isophthalic polyester resin formulation with a low flame spread rating of 25 or less designed for applications where there is moderate exposure to corrosive elements.

VEFR: Vinyl ester resin system with a flame spread of 25 or less for dependable resistance to both acidic and alkaline environments.

PHENOLIC: A USCG approved flame-resistant phenolic resin with an extremely low flame spread of 10 and a smoke index of 400 (unpainted); flame spread of 15 and a smoke index of 450 (painted, UV coating) - designed primarily for the offshore industry. (Coast Guard approved for Level 2 & 3 performance criteria). All Safe-T-Span phenolic grating requiring ASTM F3059-18 approval is inspected independently at the production stage to ensure quality control standards are followed.

Molded Product Resins

Corrosion in the workplace negatively impacts your bottom line. Each year, industrial plant executives eliminate expensive corrosion-related maintenance problems by switching to Fibergrate[®] molded grating. Various applications present different requirements, so Fibergrate offers numerous standard resin systems to address multiple needs.

Vi-Corr[®]: A superior vinyl ester resin developed for reliable performance in the toughest environments. It offers outstanding resistance to a wide range of highly corrosive situations, from caustic to acidic. In fact, no other resin system can match the performance of Vi-Corr in highly acidic environments. Vi-Corr has replaced VE-25. Color: orange or dark gray. Flame spread: ASTM E84 rating of 25 or less. Certifications: DNV Type Approval No. TAF000003C; ABS Type Approval No. 01-HS34733-X; meets the USCG requirements for general fire rating*.

FGI-AM[®]: This NEWLY improved food-grade isophthalic polyester resin system is infused with Microban[®] antimicrobial product protection which inhibits the growth of odor and stain-causing bacteria for the lifespan of the product. Fibergrate's FGI-AM resin offers the necessary corrosion resistance to meet the requirements of the food and beverage industry. This product is intended only for non-public health uses. Color: light gray or green. Flame Spread: ASTM E84 rating of 25 or less. Certifications: USDA Approvable.





Resin Technology

Molded Product Resins (Continued)

Corvex[®]: This newly improved isophthalic polyester resin system outperforms a number of competitive fiberglass and metal products and meets the requirements for corrosion resistance found in industrial, chemical processing and water/ wastewater applications. This upgraded formulation has replaced IFR, CP-84 and FS-25 resins. Color: yellow, dark gray, or dark green. Flame Spread: ASTM E84 rating of 25 or less. Certifications: Meets the USCG requirements for general fire rating*.

XFR: This eXtra Fire Retardant vinyl ester resin is recommended for use where the fire potential is high. Color: dark gray. Flame Spread: ASTM E84 rating of 10 or less, a level exceeded by no other resin system. Certifications: Meets the USCG requirements for general fire rating*.

ELS: This Extremely Low Smoke resin is an acrylic-modified polyester system that is ideal for tunnel, offshore, mass transit and other confined space applications. ELS exhibits low ignitability, low smoke generation and extremely low smoke toxicity. Color: dark gray. Flame Spread: ASTM E84: flame spread index of 25 or less, a smoke developed index of 100 or less and Fuel Contribution of 0. Certifications: DNV Type Approval No. TAF000003C; meets the USCG requirements for general fire rating*.

Super Vi-Corr[®]: This family of resin systems consists of more than 30 custom formulas engineered to provide corrosion control solutions in applications that are too severe for conventional FRP and other building materials. Each Super Vi-Corr resin was engineered for the best possible performance in specific chemical and/or elevated temperature environments. These systems exist for aggressive chemical service in reagents like solvents, acidic oxidizers, chlorine dioxide, sodium hypochlorite and liquid desiccants. Certain formulas are also suited for elevated temperature applications up to 400° F. Super Vi-Corr gratings are typically used for packing hold-downs and support in environmental and process scrubber applications. Color: natural-tan to beige. Flame Spread: non fire retardant, unless specified.

*For specific requirements and questions, please contact technical services.

Specialty

Fibergrate also offers specialty resins custom designed to meet your specific needs. These special formulations are developed to address unique and demanding services and applications, as well as niche market needs (Super Vi-Corr family of resins).

We can engineer resin systems to address temperature, flame, smoke and toxicity requirements. Our HSUV resin system was developed to address the intense UV effects found in offshore applications. Fibergrate's custom formulations with low smoke/toxicity properties were engineered with the United States Navy for below-deck marine service.

Architectural Formulations: Fibergrate's standard formulations are designed for industrial and corrosive applications. Special formulations and colors are required to meet the unique demands of architectural, fountain and pool projects. Please contact Fibergrate for additional information.

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