Performance Materials

HETRON® FR 606 INF Series Resin

Version: 1.0_20250602

Overview

HETRON FR 606 INF resin is a novel epoxy vinyl ester resin designed for infused infrastructure applications where a degree of fire retardancy[(1)] is required in the end use application. Used as is, infused parts made with HETRON FR 606 INF resin have achieved Class II flame spread results as measured by ASTM E-84 test protocols. This product was previously marketed as DERAKANE 610 C-150 resin. A pre-promoted version - HETRON FR 606 INF-55 resin was previously marketed as DERAKANE 610 C-150 P resin.

[(1)] Laminates produced using this resin will burn if provided with sufficient heat and oxygen. The degree of flame retardancy of the cured polyester resin is characterized by the ASTM E-84 tunnel test. This test is performed under strictly controlled conditions where a flame spread rating is assigned according to comparisons with test set-point materials. The behavior of the cured composite under these controlled conditions can vary from an actual fire situation.

Applications

Recommendations for specific services and environments can be provided by contacting us at Hetron@altapm.com

Typical Liquid Resin Properties

Property at 25°C (77°F) unless otherwise marked	Hetron FR 606	Hetron FR 606 INF-55	Unit
Brookfield Viscosity, LV #2@60 rpm	130	130	cps (mPas)
Percent Solids	52	52	%
Specific Gravity	1.07	1.07	gm/cc
Gel Time using 1.25% MEKP	29	55	minutes
Gel to Peak Exotherm Time	27	20	Minutes
Peak Exotherm Temperature	295	320	°F

Typical Cured Resin Properties

Property at 25°C (77°F) unless otherwise marked	Value	Value	Test Method
Tensile Strength	10,300 psi	71 MPa	ASTM D638 / ISO527
Tensile Modulus	510 ksi	3530 MPa	ASTM D638 / ISO527
Flexural Strength	18,700 psi	129 MPa	ASTM D790 / ISO178
Flexural Modulus	570 ksi	3920 GPa	ASTM D790 / ISO178
Heat Deflection Temperature	169 °F	76 °C	ASTM D648 / ISO75A

Resin cured using: 0.2 g 6% cobalt naphthenate and 1.25% MEKP 925H per 100 g resin.
Cure Schedule: 24 hours at room temperature followed by 24 hours at 140°F.

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Standard package
Steel drum with net weight of 220 kgs (485 lbs).

Commercial Warranty
Three months from the date of manufacture, when stored in accordance with the storage conditions stated below.

Storage
All other conditions being equal, higher storage temperatures will reduce product stability and lower storage temperatures will extend product stability. Store at temperatures below 25°C / 77°F. Avoid exposure of storage tanks and storage containers to heat such as direct sunlight, steam pipes, and other heating sources.

Containers: Keep containers sealed to prevent moisture pick-up and monomer loss. Do not store drums and other small containers outdoors. Mild mixing is recommended after prolonged storage. Rotate stock.

Bulk Storage: Consult with your ALTA Performance Materials account representative for a guide to best practices on bulk resin storage and handling.

Notice
All information presented herein is believed to be accurate and reliable, and is solely for the user's consideration, investigation, and verification. The information is not to be taken as an express or implied representation or warranty for which ALTA Performance Materials assumes legal responsibility. Any warranties, including warranties of merchantability, fitness for use or non-infringement of intellectual property rights of third parties, are herewith expressly excluded.

Since the user's product formulations, specific use applications and conditions of use are beyond the control of ALTA Performance Materials, ALTA makes no warranty or representation regarding the results which may be obtained by the user. It shall be the sole responsibility of the user to determine the suitability of any of the products mentioned for the user's specific application.

ALTA Performance Materials requests that the user reads, understands, and complies with the information contained herein and the current Safety Data Sheet.

[i]All properties are typical values. Results may vary. Typical values are not a guaranteed analysis of any specific lot or specification.
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© February 26