Technical Datasheet

Ashland Performance Materials

HETRON™

HETRON™ FR 610 Flame Retardant Resin

HETRON FR610 resin is a highly brominated, flame retardant(1), high viscosity polyester resin.

- Contains 30% bromine by weight
- Exhibits high to medium reactivity characteristics
- Good thermal endurance

APPLICATIONS AND USE

HETRON FR610 resin can be used as a concentrate to blend with non-halogenated resins and/or styrene to yield resins possessing varying levels of flame retardancy. HETRON FR610 resin is suitable for applications in the construction, transportation, marine, and electrical markets where flame retardancy is required.

HETRON FR1540 resin containing 34% bromine is used for improved weathering properties. Recommendations for specific services and environments can be provided by contacting us at hetron@ashland.com.

TYPICAL LIQUID RESIN PROPERTIES

Property(2) at 25°C (77°F)	Value	Unit
Solids	77	%
Viscosity	18	stokes
Acid Value (solution)	11	
Specific Gravity	1.41	gm/cc
Monomer	styrene	

(1) HETRON polyester resin will burn if provided with a sufficient amount of heat and oxygen. The degree of flame retardancy of the cured polyester resin is characgterized 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.
(2) Properties are typical values based on material tested in our laboratories. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

TYPICAL CURING CHARACTERISTICS

SPI Gel Time - 82°C (180°F) Bath, 1% Benzoyl Peroxide	Value	Unit
Gel Time	7	minutes
Total Time	8.5	minutes
Peak Exotherm	205 (400)	°C (°F)

Responsible Care*

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CERTIFICATES AND APPROVALS	The manufacturing, quality control and distribution of products, by Ashland Performance Materials, comply with one or more of the following programs or standards: Responsible Care, ISO 9001, ISO 14001 and OHSAS 18001 by .
STANDARD PACKAGE	Non-Returnable Drum with Net Weight of 275 Kgs (606 Lbs) DOT Label Requirement: Flammable Liquid
COMMERCIAL WARRANTY	Three months from date of shipment, when stored in accordance with the condtions stated below.
STORAGE	Drums - Store at temperatures below 25°C (77°F). Storage life decreases with increasing storage temperature. Avoid exposure to heat sources such as direct sunlight or steam pipes. To avoid contamination of product with water, do not store outdoors. Keep containers sealed to prevent moisture pick-up and monomer loss. Mild mixing is recommended after prolonged storage. Rotate stock. Bulk - See Ashland's Bulk Storage and Handling Manual for Polyesters and Vinyl Esters. A copy of this may be obtained from Ashland Performance Materials at +1.614.790.3333 or 800.523.6963. All other conditions being equal, higher storage temperatures will reduce product stability and lower storage temperatures will extend product stability.
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 Ashland assumes legal responsibility. Any warranties, including warranties of merchantability 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 Ashland, Ashland makes no warranty or representation regarding the results which may be obtained by the user. It shall be the responsibility of the user to determine the suitability of any of the products mentioned for the user's specific application. Ashland requests that the user reads, understands and complies with the information contained herein and the current Material Safety Data Sheet.

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