ENGUARD™ EZFR Series Fire Retardant Gelcoat

Overview
Enguard EZFR Series is a flame retardant gelcoat, for spray applications, based on a special formula of resin and mineral fillers. This gelcoat has good resistance to flame formation with low smoke emission.

Applications
Enguard EZFR series gelcoats contain mineral fillers and halogenated compounds that help to suppress both smoke and flame when used in conjunction with a fire-retardant laminating system. Proper protective equipment is required for any surface disruption. Laminates made with the Enguard EZFR series gelcoats have met a V-0 self-extinguishing UL-94 rating within 10 seconds with no dripping. Laminates made with Enguard EZFR Series Gelcoats have also met the ASTM E162-98 (Flame Spread) and ASTM E662-97 (Smoke Density) criteria for mass transit applications as well as ASTM E84, Class I FSI (Flame Spread Index).

Typical Liquid Resin Properties

Property at 25°C (77°F) unless otherwise marked	Value	Unit	Notes
Brookfield Viscosity	4,800	Cps (mPas)	Brookfield RV 4, 20 rpm
Thix Index	5.5		Brookfield RV 4, 2/20 rpm
Geltime	14	Min	1.8% MEKP-9
Hide	12	Mils	Complete

Certificates and Approvals
The manufacturing, quality control and distribution of products, by INEOS Composites, are complying with one or more of the following programs or standards: ISO 9001, ISO 14001 and OHSAS 18001.

Note: The values given for fire resistance are purely indicative. The finished parts manufactured by our customers must be tested according to the laws in force or to specific technical specifications. Optimum fire resistance is obtained on completely hardened resins and laminated parts.

Handling and Use
It is recommended that the gelcoat be catalyzed at a level of 1.5% to 2.0% MEKP and applied at a thickness of no less than 12 mils. Optimum results are obtained at a uniform thickness of 20 mils.

For more information regarding good handling and working practices, see the INEOS Composites "Gelcoat Handling Guide".

Commercial Warranty
45 days from the date of shipment.

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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 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.

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 INEOS Composites 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 INEOS Composites, INEOS Composites 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.

INEOS Composites requests that the user reads, understands, and complies with the information contained herein and the current Safety Data Sheet.

Commercial contacts by region available at:
https://www.ineos.com/businesses/ineos-enterprises/businesses/ineos-composites/contacts/

[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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