

Technical Datasheet

Ashland Performance Materials

MAXGUARD®
PREMIUM GELCOATS

MAXGUARD® FR // S_ Flame Retardant Gelcoat with INSTINT

MAXGUARD FR // S_ is a halogen free flame retardant gelcoat, for spray application, based on a special formula of resin and mineral fillers. The gelcoat has good resistance to flame and smoke formation is low.

Typical liquid gelcoat properties

Properties at 23°C	Value (nominal)	Unit	Method
Viscosity, Brookfield RV 4, 10 rpm	8000	mPas	L002
Viscosity, cone&plate	350	mPas	L004
Density	1,4-1,5	g/cm ³	QC 16
Geltime, 2% MEKP-50			
Maxguard FR // SA	8	min	L005
Maxguard FR // SC	18	min	L005

Application and use

MAXGUARD FR // S_ is a halogen free flame retardant gelcoat for spray application. It is suitable for use in a variety of FRP products which require good flame retardant properties. MAXGUARD FR // S_ gelcoat is mainly used in the transportation and building and construction industry.

To achieve the best results, the final cured gelcoat thickness should be 300-400 microns.

Note: For more information on application and use of fire retardant gelcoats and resins, please contact Ashland's sales and technical service personal.

Fire retardant properties

Test	Value	Norms
Oxygen index	26	ASTM D2863-70
Epiradiator test *)	M 2	NF P 92-501
Smoke test *)	F 1	NF F 16-101
Class of Fire *)	S 4	DIN 5510-2:2009-05
Smoke formation *)	SR 2	DIN 5510-2:2009-05
Class of Material dropping in fire *)	ST 2	DIN 5510-2:2009-05
Toxicity, t(zul)=30 min *)	< 1	DIN 5510-2:2009-05
Toxicity, t(zul)=15 min *)	< 1	DIN 5510-2:2009-05



Responsible Care*

Ashland is committed to the continuous evolution of technology and service solutions that promote health, safety and environmental protection around the world.
* Registered service mark of the American Chemistry Council. © Registered trademark and ™ trademark of Ashland Inc.

ASHLAND®
With good chemistry great things happen.™

Technical Datasheet

Ashland Performance Materials

MAXGUARD[®]
PREMIUM GELCOATS

MAXGUARD[®] FR // S_ Flame Retardant Gelcoat with INSTINT

*) Structure: Gelcoat MAXGUARD FR with Hetron F640 TF(E) resin

Certificates and approvals

The manufacturing, quality control and distribution of products, by Ashland Performance Materials, are complying with one or more of the following programs or standards: Responsible Care, 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

For good handling and working practices, see Ashland "Gelcoat Handling Guide". It is highly recommended that all materials are stored at stable temperature under 25 °C preferably indoors, and away from direct sunlight. A high quality methyl ethyl ketone peroxide (MEKP) catalyst should be used between 1.5 - 2.5%. The gelcoat with the catalyst must be gently stirred before taken in use.

Shelf life of MAXGUARD FR // S_ is 4 months.

Prolonged storage or storage outside of recommended conditions can influence gelcoat liquid properties like viscosity and gel time and it is recommended to test these properties before starting application

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.



Responsible Care*

Ashland is committed to the continuous evolution of technology and service solutions that promote health, safety and environmental protection around the world.

* Registered service mark of the American Chemistry Council. © Registered trademark and [™] trademark of Ashland Inc.

ASHLAND[®]
With good chemistry great things happen.™