

Technical Datasheet



MAXGUARD™ NP // FPS special low emission gelcoat

MAXGUARD NP // FPS is a premium gelcoat combining advanced performance with reduced emissions. MAXGUARD NP // FPS gelcoat gives the final products excellent UV and blister resistance, good cosmetics and a tough surface. The special feature is a prolonged surface tackiness, to work against fibre matt slide-down during the preparations for infusion application.

MAXGUARD NP // FPS is featuring INEOS Composites's patented LE technology, it provides up to 50% less VOC emissions than standard gelcoat. This means a better working environment and savings in gelcoat consumption.

Typical liquid gelcoat properties

Properties at 23 °C	Value	Unit	Method
Viscosity, Brookfield RV4, 10 rpm	8500	mPas	QC 2
Viscosity, Brookfield RV4, 100 rpm	1650	mPas	QC 2
Viscosity, Brookfield RV4, 0,5 rpm	160 000	mPas	QC 2
Geltime, 2% MEKP-50	10-15	min	L005
Film cure, 2% MEKP-50	55	min	X.Inst.GC02

Application and use

MAXGUARD NP // FPS is a premium gelcoat for spray applications and is pre-accelerated. It is recommended for use in the marine or similar industries with high demand for final product surface properties.

Note: When applying the gelcoat, the layer must be 400 to 800 microns thick, depending on the intended use of the product manufactured.

Additional information

The economical advantage of using MAXGUARD NP // FPS with LE Technology compared to a standard gelcoat is a 10-15% lower gelcoat consumption due to an increase in transfer efficiency from 80% to 90%. These results are based on scale measurement of the total gelcoat amount sprayed and the final amount of gelcoat in the mold. The results correlate well with the infrared measurements. See table.

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Measurement	LE Technology	Standard
Styrene content	20%	39%
Spraying time	3 minutes	3 minutes
Gelcoat sprayed ^α	3,0 Kg	3,0 Kg
Gelcoat in mold ^α	2,7 Kg	2,4 Kg
Transfer efficiency	90%	80%
Emission when spraying ^{αα}	3,6%	7,0%
Total emission ^{αα}	6,7%	13,6%

^α by scale measurement

^{αα} by infrared measurement

Certificates and approvals

MAXGUARD NP // FPS complies with the requirements set by the Lloyd's Register for building of small crafts.

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.

Handling and storage

For good handling and working practices, see INEOS Composites "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.

The material should be used within 3 months from the date of manufacture. 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

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Notice

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