

Technical Datasheet



ENGUARD™ TM // H/S General purpose Topcoats

ENGUARD™ TM // H/S topcoats are high quality general purpose topcoats, based on isophthalic polyester resin. The base resin and the gelcoat formulas are optimized to give final products good mechanical and weathering properties.

Typical liquid topcoat properties

| Property at 23°C | H (Brush) Value | S (Spray) Value | Unit | Method |
|------------------------------------|--------------------|--------------------|------|------------|
| Viscosity, Brookfield (RV4,10 rpm) | 10000 | 6000 | mPas | ISO 2555 |
| Viscosity, cone & plate | > 700 | 230 | mPas | ISO 2884 |
| Geltime, 2% MEKP-50 | 13 | 7 | min | ASTM D2471 |

Typical topcoat base resin properties

| Property (postcure 24h at 50°C) | Value | Unit | Method |
|---------------------------------|-------|-----------|------------|
| Tensile strength | 70 | MPa | ISO 527 |
| Tensile modulus | 3600 | MPa | ISO 527 |
| Elongation at break | 3,5 | % | ISO 527 |
| Flexural strength | 115 | MPa | ISO 178 |
| Flexural modulus | 3500 | MPa | ISO 178 |
| Heat Deflection Temperature | 70 | °C | ISO 75(A) |
| Water absorption after 28 days | 80 | mg/sample | ISO 62 |
| Hardness | 42 | Barcol | ASTM D2583 |

Application and use

ENGUARD™ TM // H/S general purpose topcoats are suitable for use in variety of products in the building and construction, transportation and marine industry.

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INEOS Composites

ENGUARD™ TM // H/S General purpose Topcoats

Certificates and approvals ENGUARD TM // H/S topcoats comply 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 use 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/topcoat with the catalyst must be gently stirred before taken in use.

The material should be used within 5 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.

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 Material Safety Data Sheet.