

Technical Datasheet

INEOS Composites

MAXGUARD™ TN // H/S Premium Topcoat

MAXGUARD TN // H/S premium topcoats are based on a special isophthalic/NPG resin. The base resin and the topcoat formula are optimized to give final products excellent mechanical and weathering properties. MAXGUARD TN // H/S premium topcoat surface is hard, glossy and tough.

Typical liquid topcoat properties

Properties at 23 °C	H (Brush)	S (Spray)	Unit	Method
	Value	Value		
Viscosity, Brookfield	13000 ¹⁾	7000 ²⁾	mPas	ISO 2555
Viscosity, cone&plate	900	250	mPas	ISO 2884
Geltime, 2% MEKP-50	13	7	min	ASTM D2471

¹⁾ RV5, 10rpm ²⁾ RV4, 10 rpm

Typical topcoat base resin properties

Properties (postcure 24h at 50 °C)	Value	Unit	Method
Tensile strength	70	MPa	ISO 527
Tensile modulus	3 600	MPa	ISO 527
Elongation at break	3,5	%	ISO 527
Flexural strength	125	MPa	ISO 178
Flexural modulus	3 600	MPa	ISO 178
Heat deflection temperature (1,81 MPa) ³⁾	90	°C	ISO 75 (A)
Water absorption , 28 days/7days/24hours	75/42/11	mg/sample	ISO 62
Hardness	41	Barcol	ASTM D2583

³⁾ post cured 24h at 50°C + 3h at 80°C

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Application and use	<p>MAXGUARD TN // H/S premium topcoats are recommended for use in the sanitary, marine or similar industries with high demands of surface properties.</p>
Certificates and approvals	<p>MAXGUARD TN // H/S are approved by the Lloyd's Register for construction of small crafts.</p> <p>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.</p> <p>MAXGUARD TN // H/S topcoats fulfill the mechanical property requirements of DIN 16946 standard for unsaturated polyester resin classes 1130 and 1140.</p>
Handling and storage	<p>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.</p> <p>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</p>
Notice	<p>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.</p> <p>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</p>

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application.

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