

Technical Datasheet

INEOS Composites

INEOS PREMIUM MARINE RESINS AME™ 5500 C

Description AME™ 5500C resin is a thixotropic, modified vinyl epoxy resin developed by INEOS exclusively for marine application. AME™ 5500C marine resin owns resilience, blister resistance, excellent fatigue life and toughness. AME™ 5500C resin can be specified for the construction of marine laminates where need low shrinkage, improved strength, impact resistance, blister resistance, and profile are required. The physical properties of cured laminates made with AME™ 5500C marine resin out perform conventional polyester resins systems, AME™ 5500C displays excellent wet-out and handing characteristics under a variety of shop conditions.

Applications AME™ 5500C is developed by INEOS for marine application and big FRP tooling.

Typical Resin Properties	Uncured Resin	Value	Unit	Method
	Viscosity at 25°C			
	-Brookfield RVT sp3, 60rpm	385	mPas	ISO 2555
	-Brookfield RVT sp3, 6rpm	900	mPas	ISO 2555
	Styrene Content	40	%	SFS 4864
	Index of thixotropy	2.33		
	Curing at 25°C *100g resin + 1g Butanox MEKP-50 catalyst			
	-Gel time	28	Min	Internal D006
	-Peak exotherm	165	°C	

Typical Cured Resin Properties	Cured Resin	Value	Unit	Method
	HDT (1.81MPa)	86.4	°C	ISO 75
	Ultimate HDT*	108	°C	ISO 75
	Flexural strength	140.1	MPa	ISO 178
	Flexural Modulus	3351.6	MPa	ISO 178
	Tensile strength	84.8	MPa	ISO 527
	Tensile modulus	3413	MPa	ISO 527
	Elongation at break	5.28	%	ISO 527

*Ultimate HDT post cured 2 hrs @60°C + 3 hrs @138°C

Certificates & Approvals The Manufacturing, quality control and distribution of products by INEOS Composites comply with one or more of the following programs or standards: Responsible Care, ISO9001, ISO14001, and OHSAS 18001.

Commercial Warranty Three months from date of manufacture, when stored in accordance with the storage conditions stated below.

Storage IBCs and Drums - Store at temperature below 25°C. Storage life decreases with increasing storage temperature. Avoid exposure to heat sources such as direct sunlight or steam pipes. To avoid contamination of product with water, do not store outdoors. Keep containers sealed to prevent moisture pick-up and monomer loss. Mild mixing is recommended after prolonged storage. Rotate stock. All other conditions being equal, higher storage temperatures will reduce product stability and lower storage temperature will extend product stability.

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 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 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**.