

## Technical Datasheet

# INEOS Composites

### AME™ 5000 INF-90 LV

AME 5000 INF-90 LV is a epoxy vinyl ester hybrid resin that has a proven history of resilience, blister resistance, excellent fatigue life and toughness. AME 5000 INF-90 LV resin addresses premium boat builder's need for excellent processability. AME 5000 series is in its second decade of proven performance. AME 5000 series is offering:

- Excellent blister resistance
- Fast wet out of glass fibers
- Excellent fatigue life
- Superior surface profiles with minimal shrink
- No foaming
- User friendly processing

#### Typical liquid resin properties

Property at 25 °C	Value	Unit	Method
Viscosity , C&P, 1000 rpm	85	mPas	ISO 2555
Geltime, 1.5% Norox MCP-75	90	min	D 006

#### Typical cured resin properties

Property	Value	Unit	Method
Postcured for 16 hours at 40 °C			
Tensile strength	57	MPa	ISO 527-1
Tensile modulus	3400	MPa	ISO 527-1
Elongation at break	2,4	%	ISO 527-1
Flexural strength	101	MPa	ISO 178
Flexural modulus	2700	MPa	ISO 178
Water absorption, 60°C, 24h <sup>1</sup>	73	mg	ISO 62
Heat deflection temperature, ultimate <sup>2</sup>	110	°C	ISO 72
<sup>1</sup> post cured 6h at 100°C			
<sup>2</sup> post cured 24h at 90°C			

#### Application and use

AME 5000 INF-90 LV resin is recommended for marine applications by infusion. AME 5000 INF-90 LV modified vinyl ester resin blend is an excellent choice for the boat builders who desires enhanced mechanical properties beyond traditional unsaturated polyester resins.

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#### Certificates and approvals

AME 5000 INF-90 LV epoxy vinyl ester hybrid resin is approved by Lloyd's Register for construction of small crafts. It is also ISO 12215-1 (small craft - hull construction and scatlings) compliant. The mechanical properties, performed on laminates prepared and post cured according to ISO 12215, meet the minimum requirements of section 4.3 of the standard.

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

It is highly recommended that all material is stored at stable temperature under 25 °C preferably indoors, and away from sunlight. Prolonged storage outside of recommended conditions can influence liquid resin properties like viscosity and gel time. It is also strongly recommended to mix resin thoroughly before use. Shelf life of AME 5000 INF-90 LV is six (6) months.

#### 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.