

NAVIDURIN[®]

High performance polymer



About NAVIDURIN[®]

NAVIDURIN[®] is a proprietary composite polymer blend that is optimized for use in marine exhaust systems and proof of our commitment to create innovative solutions. The combination of additives brings a unique set of properties that outperforms traditional materials used in the most demanding environment on board on critical values. NAVIDURIN[®] is more durable, has a higher resistance to heat and pressure and is longer lasting than conventional polymers. A high-performing cost effective alternative to GRP (Glass Reinforced Polyester) solutions. A polymer made for designers who desire precision-engineered products without maintenance.

USE OF NAVIDURIN[®]

NAVIDURIN[®] is used in recreational and in commercial vessels. The blend delivers performance comparable to and exceeding high-performance GRP, including good strength and durability. In addition NAVIDURIN[®] delivers good finishing qualities and offers the same freedom in design as ABS (Acrylonitrile Butadiene Styrene), making it an excellent choice for use in products for thermal applications. So whether it's an exhaust for a small cruiser or one for a commercial vessel - NAVIDURIN[®] is up to the challenge.

Summary

- Heat resistant with a heat deflection temperature (HDT A (1.8 MPa)) of 250 °C according to international standard DIN EN ISO 75
- High resistance to elongation: tensile strength of 25,400 psi (A.B.Y.C requirement is 10,900 psi)
- Flexural modulus of 1,232,820 psi (A.B.Y.C requirement is 500,000 psi)
- Precision moulded for perfect alignment
- Lightweight
- Completely corrosion free
- Galvanically isolated
- Heat aging stabilized
- CE. and A.B.Y.C. approved

Specifications	NAVIDURIN [®]	Polyester resin	Class 1 Epoxy Vinyl Ester resin
Material temperature resistance	260 °C	150 °C	174 °C
Continuous operating temperature	180 °C	120 °C	140 °C
Maximum operating temperature	250 °C	150 °C	174 °C
Temperature for deflection under load (1.8MPa, 18 bar, 260 psi)	250 °C	120 °C	140 °C
Tensile strength	175(0) Mpa (Bar) 25,400 psi	100(0) Mpa (Bar) 14,500 psi	114(0) Mpa (Bar) 16,530 psi
Flexural strength	300(0) Mpa (Bar) 43,500 psi	140(0) Mpa (Bar) 20,300 psi	167(0) Mpa (Bar) 24,200 psi

