

Technical Data Sheet

Durolight® S1

Product characteristics

- Glass-reinforced thermoset SMC high-pressure laminate developed for applications at cryogenic temperatures
- Low thermal conductivity and low weight

Product industries

- LNG engines Cryogenic Insulation
- Pipelines
- Subsea
- Healthcare

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g/cm ³	1,3
Flexural strength ¹	ISO 178	MPa	130
Modulus of elasticity in flexion [⊥]	ISO 178	MPa	8000
Compressive strength $^{1)}$ $^{\perp}$	ISO 604	MPa	250
Tensile strength II	ISO 527	MPa	60
Thermal properties			
Coefficient of linear expansion II	TMA (Mettler)	10 ⁻⁶ x K ⁻¹	15 - 20
Thermal conductivity ^L RT		W / (m * K)	≈ 0,22
Thermal conductivity ¹ -196		W / (m * K)	≈ 0,18 ²⁾
Physical properties			
Water absorption (method 1)	ISO 62	%	< 0,2

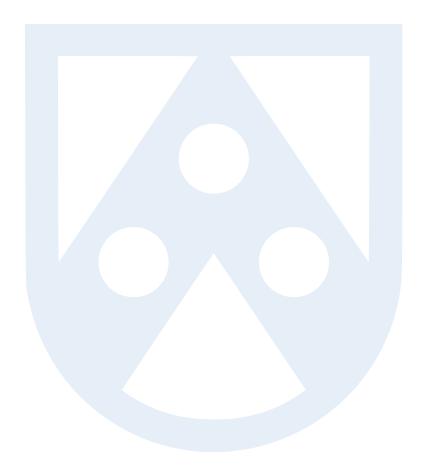






= perpendicular to the lamination II = parallel to the lamination

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 $^{^{1)}}$ Sample size: 20 x 20 x 20 mm

²⁾ Extrapolated value