

## Technical Data Sheet

# Durolight<sup>®</sup> S1

### Typical characteristics

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

### Typical industries

- Systèmes de propulsion au GNL - isolants à basse température
- Pipelines
- Installations sous-marines
- Healthcare

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

= perpendicular to the lamination || = parallel to the lamination

<sup>1)</sup> Sample size: 20 x 20 x 20 mm

<sup>2)</sup> Extrapolated value

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