

## **Technical Data Sheet**

## Durolight<sup>®</sup> S1

GFK-UP

#### **Typical characteristics**

 Glass-reinforced thermoset SMC high-pressure laminate developed for applications at cryogenic temperatures

#### **Typical industries**

- LNG 发动机 低温隔热件
- 管路
- 水下
- Healthcare
- Low thermal conductivity
- Low weight

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g / cm <sup>3</sup>	1,3
Flexural strength <sup>⊥</sup>	ISO 178	MPa	130
Modulus of elasticity in flexion $^{\perp}$	ISO 178	MPa	8000
Compressive strength <sup>1) ⊥</sup>	ISO 604	MPa	250
Tensile strength II	ISO 527	MPa	60
Thermal properties			
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>
Physical properties			
Water absorption (method 1)	ISO 62	%	< 0,2

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# Röchling

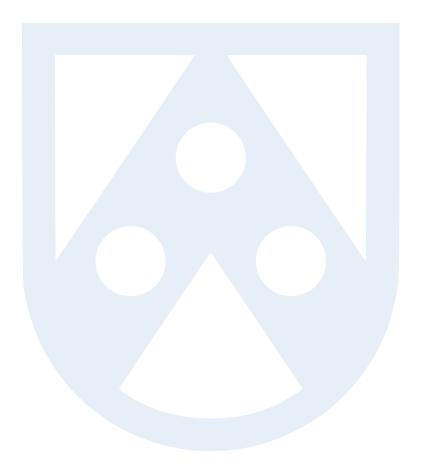
### Industrial

 $\perp$  = perpendicular to the lamination II = parallel to the lamination

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

2) Extrapolated value

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