

Technical Data Sheet

Durolight[®] S1

Typical characteristics

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

Typical 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 [⊥] | ISO 178 | MPa | 130 |
| Modulus of elasticity in flexion [⊥] | ISO 178 | MPa | 8000 |
| Compressive strength ^{1) ⊥} | 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 [⊥] RT | | W / (m * K) | ≈ 0,22 |
| Thermal conductivity [⊥] -196 | | W / (m * K) | ≈ 0,18 ²⁾ |
| Physical properties | | | |
| Water absorption (method 1) | ISO 62 | % | < 0,2 |

