Technical Data Sheet

Durolight® S

Typical characteristics

- Baja conductividad térmica
- Alta resistencia mecánica
- Laminado de alta presión SMC termoestable reforzado con vidrio desarrollado para aplicaciones a temperaturas criogénicas

Typical industries

- Propulsores de gas natural licuado (GNL) - Aislamientos para bajas temperaturas
- Oleoductos
- Aplicaciones submarinas
- Healthcare
- Hidrógeno

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g / cm^3	1,85
Flexural strength ⊥ 0°C	ISO 178	MPa	140
Flexural strength ⊥ +50°C	ISO 178	MPa	125
Flexural strength ⊥ +100°C	ISO 178	MPa	110
Flexural strength ⊥ +150°C	ISO 178	MPa	80
Flexural strength ⊥ -50°C	ISO 178	MPa	160
Flexural strength ⊥ -100°C	ISO 178	MPa	175
Flexural strength ⊥ -150°C	ISO 178	MPa	190 [1)]
Flexural strength ⊥ -196°C	ISO 178	MPa	205 [1)]
Modulus of elasticity in flexion ⊥ 0°C	ISO 178	MPa	9000
Compressive strength ⊥ 0°C	ISO 604	MPa	250
Compressive strength ⊥ +50°C	ISO 604	MPa	220
Compressive strength ⊥ +100°C	ISO 604	MPa	190
Compressive strength ⊥ +150°C	ISO 604	MPa	160
Compressive strength ⊥ -50°C	ISO 604	MPa	280
Compressive strength ⊥ -100°C	ISO 604	MPa	310
Compressive strength ⊥ -150°C	ISO 604	MPa	335 [1)]
Compressive strength II RT	ISO 604	MPa	170
Compressive strength ⊥ -196°C	ISO 604	MPa	360 [1)]

	Test method	Unit	Guideline value
Tensile strength II 0°C	ISO 527	MPa	75
Impact strength ⊥ (Charpy) RT	ISO 179	kJ / m^2	75
Shear strength II RT	DIN EN 60893	MPa	20
Thermal properties			
Flammability	UL 94	/	V0 / 3mm
Smoke density & toxicity, class	NF F 16-101	/	F0
Fire test, class	NF P 92-501	/	M1
Thermal conductivity ⊥ RT		W / (m * K)	≈ 0,3 [1) 2)]
Thermal conductivity ⊥ -50°C		W / (m * K)	≈ 0,27 [1) 2)]
Thermal conductivity ⊥ -196		W / (m * K)	≈ 0,21 [1) 2)]
Physical properties			
Water absorption (4mm thickness)	ISO 62	%	0,2

⊥ = perpendicular to the lamination

II = parallel to the lamination

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