



GRL blue

GRL: abbreviation for: glass-reinforced laminate
Matrix: modified epoxy resin, antimicrobial
Reinforcement: glass fibre
Temperature range: -60°C – +120°C
Thickness: 1.0 mm
Compliance: food safe – regulation (EC) No. 1935/2004 + FDA §177.2280

Mechanical properties

	Test method	Typical value
Flexural strength [MPa]	EN 63	610
Tensile strength [MPa]	EN 61	380
Compressive strength [MPa]	EN 2850	360
Interlaminar strength [GPa]	EN 2377	23
Modulus of elasticity [MPa]	EN 63	23,000

Electrical properties

	Test method	Typical value
Resistance between plugs [Ω]	DIN 53482	10^{12}
High voltage strength [KV]	DIN 53481	80/70
Dissipation factor at 1 MHz	DIN 53483	0.03
Dielectric constant	DIN 53483	5
Tracing resistance	DIN/IEC 112	210
Electrical corrosion	DIN 53489	AN 1.2

Thermal properties

	Test method	Typical value
Limit temperature [°C]	VDE 0304	-60/+120
Thermal conductivity [W/m K]	DIN 52672	0.25
Thermal expansion factor [10 ⁶ /K]	VDE 0304	15
Thermal class	VDE 0534	F
Glow resistance	VDE 0534	2a
Flame resistance	UL 94	V0

Other properties

	Test method	Typical value
Density [g/cm ³]	DIN 53479	2.0
Water absorption [mg]	DIN 53495	15
Colour	–	blue
Fibre reinforcement type [g/m ²]	EN 12127	200
Resin content [Wt.%]	–	33
Fibre density [g/cm ³]	–	2.54