



Product Data

GRADE: GBLS

GENERAL DESCRIPTION

GBLS is a flame retardant glass reinforced polyester moulding compound which is moulded by the application of heat and pressure to give parts with good mechanical and electrical resistance properties.

SPECIAL CHARACTERISTICS

GBLS is especially suitable for applications where the spread of fire and the consequent generation of smoke must be minimised. No additives are included which would liberate toxic fumes on burning. GBLS 7317 is fully compliant with London Underground Limited's Code Of Practice for "Limited or Dispersed use". It has also gained NF F 16-101 approval to Class IO F1.

TYPICAL PROPERTIES OF MOULDINGS

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>UNITS</u>	<u>VALUE</u>
<u>Physical Properties:</u>			
Density	BS2782 Method 620A	g/cm ³	1.88
Mould Shrinkage	BS2782 Method 640A ISO 2577-75	%	0.13
Water Absorption	BS2782 Method 430A ISO 62-80	mg	20
<u>Thermal Properties:</u>			
After shrinkage (48 hr at 100°C)	BS2782 Method 640A ISO 2577-75	%	None
Temperature of deflection under load (1.8 MPa)	BS2782 Method 121A	°C	> 200
<u>Flame Retardant Properties:</u>			
Oxygen Index	BS2782 Method 141 ISO 4589	%	> 100 non-burning in pure oxygen
Flammability temperature index	BS6853 Appendix A	°C	> 350
Smoke emission, 3 metre cube, A ₀	BS6853 Method B.5.1	m ² /g	0.008
Toxic fume emission	LUL 6220 05 601	-	Compliant
Fire propagation index, I	BS476: Part 6	-	8.5
Surface spread of flame NF F 16-101	BS476: Part 7	-	Class 1
		Class	IO F1
<u>Mechanical Properties:</u>			
Charpy impact strength (notched)	BS2782 Method 359 ISO 179-82	kJ/m ²	20
Flexural strength	BS2782 Method 335A ISO 178-75	MPa	62
Flexural modulus	BS2782 Method 335A ISO 178-75	GPa	9.0
Tensile strength	BS2782 Method 320E ISO 527	MPa	20
<u>Electrical Properties:</u>			
Electric strength at 90 °C	BS2782 Method 220 ISO 243	MV/m	11.0
Arc resistance	ASTM D495-73	s	200
Insulation resistance	BS2782 Method 204C ISO 167	log ₁₀ ohms	12.5
Tracking resistance	BS5901	V	> 600
Surface resistivity	BS2782 Method 207A	log ₁₀ ohms	13.0
Volume resistivity	BS2782 Method 231A	log ₁₀ ohms cm	13.0

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Before use consult the appropriate Industrial Dielectrics (UK) Ltd. Health and Safety Data.

The values quoted in the properties table have been obtained by standard test methods, using compression moulded specimens. They provide useful comparisons between types but do not necessarily indicate the performance of commercial parts, which may differ due to a number of factors, including colour, component design, mould design, and method of manufacture and moulding.

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