



Product Data

GRADE: HS

GENERAL DESCRIPTION

Type HS is a flame retardant glass reinforced polyester moulding compound, which is moulded by the application of heat and pressure to form parts with good mechanical and electrical insulation properties.

SPECIAL CHARACTERISTICS

Type HS is a high glass fibre content material to provide high mechanical strengths and rigidity.

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	1.73
Mould shrinkage	BS2782 Method 640A ISO 2577	%	0.08
Water absorption	BS2782 Method 430A ISO 62	mg	15
<u>Thermal Properties</u>			
After shrinkage (48 hr at 100°C)	BS2782 Method 640A ISO 2577	%	None
Temperature of deflection under load (1.8 MPa)	BS2782 Method 121A ISO 75	C	> 200
<u>Flame Retardant Properties</u>			
Oxygen index	BS2782 Method 141 ISO 4589	%	28
<u>Mechanical Properties</u>			
Charpy impact strength (notched)	BS2782 Method 359 ISO 179	kJ/m ²	35
Flexural strength	BS2782 Method 335A ISO 178	MPa	115
Flexural modulus	BS2782 Method 335A ISO 178	GPa	10.0
Tensile strength	BS2782 Method 320E	Mpa	40
<u>Electrical Properties</u>			
Electric Strength at 90°C	BS2782 Method 220 IEC 243	MV/m	9.0
Arc Resistance	ASTM D495-73	s	186
Insulation Resistance	BS2782 Method 232C IEC 167	log ₁₀ ohms	11.4
Tracking Resistance	DIN 53480 Method A	Grade	KA3c
	DIN 53480 Method B	Grade	>B600
	BS5901 IEC 112	V	> 600

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Before use consult the appropriate IDI Composites 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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