Composites International
THERMOSET MOLDING COMPOUNDS

Product Data

GRADE: **TYPE HSNB**

GENERAL DESCRIPTION

Type HSNB 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 HSNB is a high glass fibre content material to provide high strength and dimensional stability combined with good fire retardancy.

TYPICAL PROPERTIES OF MOULDINGS

PROPERTY	TEST METHOD	UNITS	VALUE
Physical Properties			
Density	BS2782 Method 620A	g/cm³	1.78
Mould shrinkage	BS2782 Method 640A ISO 2577	%	0.10
Water absorption	BS2782 Method 430A ISO 62	mg	15
Thermal Properties			
After shrinkage (48 hr at 100ºC)	BS2782 Method 640A ISO 2577	%	None
Temperature of deflection under load (1.8 MPa)	BS2782 Method 121A ISO 75	°C	> 200
Flame Retardant Properties			
Oxygen index	BS2782 Method 141 ISO 4589	%	40
Mechanical Properties			
Charpy impact strength (notched)	BS2782 Method 359 ISO 179	kJ/m²	36
Flexural strength	BS2782 Method 335A ISO 178	MPa	110
Flexural modulus	BS2782 Method 335A ISO 178	GPa	10.0
Tensile strength	BS2782 Method 320E	Mpa	38
Electrical Properties			
Electric Strength at 90ºC	BS2782 Method 220 IEC 243	MV/m	9.0
Arc Resistance	ASTM D495-73	s	190
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
Loss Tangent at 1MHz	BS2782 Method 207A	tan	0.013

Before use consult the appropriate IDI Composites. 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.

IDI Composites,Unit One Oldbury Park Oldbury West Midlands England B69 4RG
Telephone [+44] (0) 121-543 5361 Facsimile [+44] (0) 121-543 5377

Registration No. 2908889 4 Drury Lane Solihull West Midlands B91 3BD