Composites International
THERMOSET MOLDING COMPOUNDS

Product Data

GRADE: GB

GENERAL DESCRIPTION

Type GB is a glass reinforced polyester moulding compound which is moulded by the application of heat and pressure to form parts having good mechanical and electrical properties.

SPECIAL CHARACTERISTICS

Type GB forms mouldings of high impact and mechanical strength. The material was specifically developed for moulding of components that require a 'cosmetic' finish and reduced flammability. The material also has UL 94 flammability classification of VO and 5 VA.

COLOURS

The material can be pigmented and can be supplied in any of the standard BMC colours. Special colours can be matched for special applications if required.

TYPICAL PROPERTIES OF MOULDINGS

Physical Properties

Density	BS2782 Method 620 A	g/cm³	1.81
Mould Shrinkage	BS2782 Method 640A ISO 2577	%	.08
Water Absorption	BS2782 Method 430A ISO 62	mg	12

Thermal Properties

After Shrinkage	BS2782 Method 640A ISO 2577	%	None
Temperature of Deflection	BS2782 Method 121A ISO 75	^{0}C	> 200
Deflection Under Load	BS2782 Method 121A ISO 75	mm	1.2

Flame Retardant Properties

Oxygen Index	BS2782 Method 141	ISO 4589	%	35
UL Rating	UL94		-	VO and 5VA

Mechanical Properties

Charpy Impact Strength (notched)	BS2782 Method 359	ISO 179	kJ/m²	26
Flexural Strength	BS2782 Method 335A	ISO 178	MPa	90
Flexural Modulus	BS2782 Method 335A	ISO 178	GPa	11.5
Tensile Strength	BS2782 Method 320E		MPa	30

Electrical Properties

Electric Strength at 90^{0}C	BS2782 Method 220	IEC 243	MV/m	11.0
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	.013

Issue - IDI- 1 - Jan 2002

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.
Information and recommendations contained in this publication are given in good faith without warranty or guarantee. No liability can be accepted for any claims, losses or demands arising out of the contents of this publication. This statement does not affect any statutory rights, which cannot be excluded by agreement.

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