



Product Data

GRADE:G8B

GENERAL DESCRIPTION

G8B is a glass fibre reinforced polyester moulding material, which is moulded by the application of heat and pressure to form parts with good mechanical properties.

SPECIAL CHARACTERISTICS

G8B has been specifically formulated to give low surface resistivity and insulation resistance. This property lowers static electricity build-up on mouldings and reduces the risk of fire or explosion in potentially dangerous environments such as those encountered in hazard areas in the petrochemical and mining industries.

The material is particularly suitable for enclosures for electrical equipment.

G8B is a reduced flammability BMC with an oxygen index of 35% and has Underwriters Laboratories UL94 V0 approval.

COLOURS

G8B is only available in Black.

TYPICAL PROPERTIES OF MOULDINGS

Physical Properties

Specific Gravity	BS2782 Method 509A		1.75
Mould Shrinkage	BS2782 Method 106B	%	0.08
Water Absorption	BS2782 Method 430A	mg	12
Oxygen Index	BS2782 Method 141	%	35
Underwriters Laboratory Approval	UL94 at 3.0mm	Rating	V0

Mechanical Properties

Flexural Strength	BS2782 Method 335A	MPa	90
Flexural Modulus	BS2782 Method 335A	GPa	10
Charpy Impact (notched)	BS2782 Method 359	kJ/m ²	22

Electrical Properties

Electrical Strength @ 90 ⁰ C	BS2782 Method 220	MV/m	1.5
Arc Resistance	ASTM D495	sec	<100
Insulation Resistance	BS2782 Method 231A	log ₁₀ ohms	7.5
Surface Resistivity	BS2782 Method 230A	log ₁₀ ohms	9.5
Volume Resistivity	BS2782 Method 230A	log ₁₀ ohms	10.0

CAUTION

In view of the common assumption that all plastics materials are good electrical insulators, the high electrical conductivity of this material needs to be emphasised to all users of both the material and the mouldings made from it.

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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