



Product Data

GRADE: **P8B**

GENERAL DESCRIPTION

Type P8B is a glass fibre reinforced polyester moulding compound, which is moulded by the application of heat and pressure to give parts with good mechanical and electrical properties.

SPECIAL CHARACTERISTICS

Type P8B has been specifically formulated to give low surface resistivity and insulation resistance. This property lowers static electricity build up on mouldings and reduces 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.

type P8B is a reduced flammability BMC with an oxygen index of 44% and has Underwriters Laboratories approval.

TYPICAL PROPERTIES

Physical Properties

Density at 23°C	BS2782 Method 620A	g/cm ³	1.79
Mould Shrinkage	BS2782 Method 640A	mm	0.0001
Water Absorption	BS2782 Method 502	mg	19.3
Oxygen Index	BS5734 Part 1 Method 4	%	44
Underwriters Laboratories	UL94		V0 at 3mm

Mechanical Properties

Flexural Strength	BS2782 Method 335A	MPa	75.3
Flexural Modulus	BS2782 Method 335A	GPa	10.6
Charpy Impact Strength (notched)	BS2782 Method 351A	kJ/m ²	22.9

Electrical Properties

Electric Strength at 90°C	BS2782 Method 201A	MV/m	1.69
Insulation Resistance	BS2782 Method 204C	log ₁₀ ohms	5.5
Volume Resistivity	BS2782 Method 202A	log ₁₀ ohms	7.7
Surface Resistivity	BS2782 Method 203A	log ₁₀ ohms	8.4

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.

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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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