



Material: PPH (Polypropylene)

Polypropylene Homo-Polymer's lightweight properties, temperature and chemical resistance and low friction surface make it an excellent modern replacement for more traditional materials such as metal and wood. High mechanical strength and tensile strength but a low notched impact strength. Polypropylene resists stress cracking and is easy to weld. The homo-polymer polypropylene offers higher rigidity, temperature limits and chemical resistance than the co-polymer.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Natural/Beige
Density	ISO 1183	g/cm ³	0.91
Water Absorption	DIN 53495	%	0.01
Chemical Resistance	DIN 53476	-	DIN 8075
Service Temp Upper	-	°c	100
Service Temp Lower	-	°c	0
Tensile strength at yield	ISO 527	MPa	30
Elongation at yield	ISO 527	%	13
Tensile strength at break	ISO 527	MPa	36
Elongation at break	ISO 527	%	>100
Impact Strength	ISO 179	kJ/m ²	No break
Notched Impact Strength	ISO 179	kJ/m ²	8
Rockwell hardness	ISO 2039-1	MPa	67
Elastic modulus	ISO 527	MPa	1350
Vicat Softening temp VST/B/50	ISO 306	°c	95
Heat Deflection temp HDT/B	ISO 75	°c	88
Linear thermal expansion coefficient	DIN 53752	K ⁻¹ x10 ⁻⁴	1.5
Thermal Conductivity at 20°c	DIN 52612	W/(Km)	0.22
Volume Resistivity	VDE 0303	Ohm/cm	>10 ¹⁶
Surface Resistance	VDE 0303	Ohm	>10 ¹³
Dielectric Constant @ 1MHZ	DIN 53483	-	2.3
Dielectric loss factor @ 1MHZ	DIN 53483	-	0.0002
Dielectric Strength	VDE 303	kV/mm	70
Tracking Resistance	DIN 53480	-	KB>600
Bondability	-	-	Limited
Physiology indifference	FDA	-	Yes
Friction Coefficient	DIN 53375	-	0.3
Flammability	UL94	-	HB

Availability:

Available in a wide variety of sheets, blocks, rods and profiles. 30% Glass Filled Reinforced and an Electrically Conductive (ESD) versions are available. Please call for further details.

Applications

Chemical storage tanks, Processing equipment, Fans, Pumps and valves, Machined components, Cladding, Partitioning.

Tel: 01604 700 880

Web: www.abgrp.co.uk

Email: sales@abgrp.co.uk

The data shown are typical values and are not intended to represent specifications. Their aim is to guide the user toward a material choice.

Not all material sizes shown within the availability programme of this data sheet are available as standard.

Please contact ABG Rubber and Plastics Ltd for further details.