



Material: HMWPE - PE500

Having a better wear resistance than HDPE, HMWPE (High Molecular Weight Polyethylene) offers a much wider range of applications within the industry. Widely used for its impact resistance.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Various see below
Density	ISO 1183	g/cm ³	0.954
Melt Index MFR 190/5	ISO 1183	g/10min	<0.1
Melt Index MFR 190/21.6	ISO 1183	g/10min	1.7-2.5
Service Temp Upper	-	°c	90
Service Temp Lower	-	°c	-100
Yield Stress	ISO 527 : 50mm/min	N/mm ²	>28
Elongation at yield Stress	ISO 527 : 50mm/min	%	=8
Breaking stress	ISO 527 : 50mm/min	N/mm ²	=36
Elongation at break	ISO 527 : 50mm/min	%	>50
Elastic modulus	ISO 527	N/mm ²	=800
Ball indentation hardness : 30 sec value	ISO 2039-1	N/mm ²	=45
Shore Hardness D : 3 sec value	ISO 868	-	62
Shore Hardness D : 15 sec value	ISO 868	-	60
Notched impact strength	ISO 179	mJ/mm ²	-
Wear by the sand and slurry method	Internal Test Method	-	400
Vicat Softening Point VST	ISO 306/B	°c	76
Crystalline melting range	ISO 3146	°c	136-138
Linear thermal expansion coefficient (23-80°c)	DIN 53752	k-1	2 x 10 ⁻⁴
Thermal Conductivity	DIN 52612	W/(K.m)	0.4
Volume resistivity	VDE 0303/3	Ohm/cm	10 ¹⁴
Surface resistivity dry	VDE 0303/3	Ohm	10 ¹¹
Arc resistance	VDE 0303/5	Grade	L4

Availability:

Generally supplied in sheet form already planed to close tolerances - 5-150mm thickness. Available in Natural, Black, Green, Red, Blue, Yellow and Burgundy. Please call for further details.

Applications:

Food preparation boards, fenders, hand rails, wear strips, hopper linings, protection strips, chain guides.

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.