

Technical Data Sheet

PE500 Sheet

Black/Green / Red / Blue / Yellow / Natural / Burgundy

PE500 is a versatile, food compliant material available in a wide range of colours. It's unique properties include a low coefficient of friction, high impact strength and abrasion resistance. PE500 has a wide operating temperature of -80°C to +80°C.



product information

Name: High Molecular Weight Polyethylene

Other names:

Abbreviation: PE500

key characteristics

- Economical alternative to PE 1000
- Excellent wear and abrasion resistance
- Good noise dampening properties
- Food compliant

applications

- Cutting boards
- Chutes
- Liners
- Food processing
- Chain parts

We also offer PE300.

PLASTICS



Certificate Number: 14352
ISO 9001



Care should be taken in selecting the most suitable quality for each application. Advice is available, but final responsibility remains with the customer.

www.epdm.co.uk

E-Mail: Sales@epdm.co.uk

Contact

Telephone: +44 (0)1625 573971

FAX: +44(0)1625 573250

PTM Ltd

Units AG2/3 Clarence Mill

Clarence Road, Bollington

Macclesfield, Cheshire

SK10 5JZ

United Kingdom

PE500 Sheet

Physical Properties

	Test	Unit	Result
1. Specific gravity	ISO 1183	g/cm ³	0.96
2. Water absorption saturation 23°C	-	%	0.01
3. Maximum service temp. Upper temp limit (no stronger mechanical stress involved)	Short Term	°C	120
Lower temp limit	Long Term	°C	80
	-	°C	-80

Mechanical Properties

	Test	Unit	Result
1. Tensile strength at yield	ISO 527	Mpa	>28
2. Elongation at yield	ISO 527	%	8
3. Abrasion (sand slurry test)	ISO 527	%	>200
4. Elongation	ISO 527	%	7650
5. Impact strength	ISO 179	kJ/m ²	no break
6. Notch impact strength	ISO 179	kJ/m ²	25
7. Ball Indentation	ISO 2039-1	Mpa	50
8. Shore-D	DIN 53505	-	63/65
9. Modulus of elasticity	ISO 527	Mpa	1100

Thermal Properties

	Test Method	Unit	Result
1. Vicat-softening point	ISO 306	°C	80
2. Coefficient of linear thermal expansion	ISO 11359	%-1	1.5-2 10 ⁻⁴
3. Thermal conductivity	DIN 52612	W/(m*K)	>0.4

Electrical Properties

	Test Method	Unit	Result
1. Surface resistivity	IEC 6093	Ω	10 ¹⁴
2. Dielectric strength	IEC 60243	kV/mm	150

Additional Data

	Test Method	Unit	Result
1. Bondability	-	-	-
2. Food compliance	FDA	-	+
3. Flammability	UL94	-	HB

All The above information is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.

Key		
Yes	Limited	No or no data
+	0	-



Certificate Number: 14352
ISO 9001



Care should be taken in selecting the most suitable quality for each application. Advice is available, but final responsibility remains with the customer.

www.epdm.co.uk

E-Mail: Sales@epdm.co.uk

Contact

Telephone: +44 (0)1625 573971
FAX: +44(0)1625 573250
PTM Ltd
Units AG2/3 Clarence Mill
Clarence Road, Bollington
Macclesfield, Cheshire
SK10 5JZ
United Kingdom