

TECHNICAL DATA SHEET

UHMWPE

Properties	Typical Values	Test Methods
Physical		
Density (g/cm ³)	0.93-0.94	ASTM D 792
Reduced Viscosity (dl/g)	~ 23	ISO R 1 191
Melt Flow Index (g/10 minutes)	<0.01	DIN 53735
Mechanical		
Notched Impact Strength (mJ/mm ²)	140 / 180	DIN 53453
Tensile Strength at 23°C (N/ mm ²)	44	DIN 53455
Elongation at break at 23°C (%)	~ 450	DIN 53455
Tensile Strength at 120°C (N/ mm ²)	22	DIN 53455
Elongation at break at 120°C (%)	~ 800	DIN 53455
Limiting Flexural Stress (N/ mm ²)	27	DIN 53452
Shore Hardness D	64 - 67	DIN 53505
Thermal		
Dimension Heat Stability	90°C	DIN 53461
Crystalline Melting Range	135 - 138°C	Microscope
Linear Expansion 20 to 100°C (°K-1)	2.10-4	DIN 52328
Thermal Conductivity (W/m.°K)	0,42	DIN 52612
Electrical		
Volume Resistance (ohms.cm)	>10 ¹⁸	DIN 53482
Surface Resistance (ohms)	>10 ¹³	DIN 53482

Application:

Heavy-duty industrial components.
 Applications requiring low temperature impact strength.
 Protective lining materials.
 Material flow enhancement e.g. lining for chutes and hoppers.
 Wear strips and slide plates.
 Wear components and non-stick surfaces in material handling applications requiring corrosion resistance e.g. sewage treatment and chemical plants, salt mines.
 Change parts for the bottling industry.
 Chain guides and runners.
 Dough rollers in food industry.
 Roller door guides.

Options:

SHEET: Natural & black:
 Size: 3000 mm x 1220 mm
 Thickness: 3 mm to 100 mm
 Big range of other sizes on request

ROD: Natural:

Diameters: 20 mm to 200 mm

Chain guides:

View our complete range of chain guides and profiles.

Standard stock includes:

NATURAL food grade

GREEN food grade

BLACK virgin, BLACK repro

BLUE 80-EX (special filled grade) and

CERADUR XL (high performance material)



Disclaimer:

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