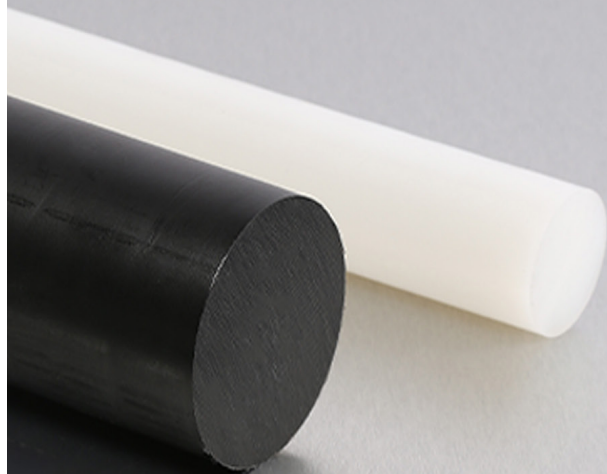
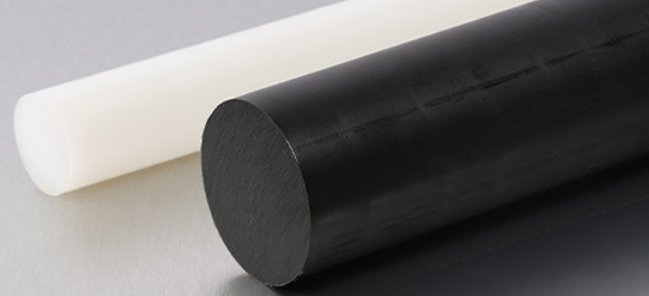


PE 1000 Annealed

Material Information



PE 1000 Annealed

Product full identity:

Polyethylene - Ultra High Molecular Weight (Annealed)

PE 1000 Annealed (additional forming process for added rigidity) has high abrasion resistance, excellent sliding properties and high toughness. It has good chemical resistance, high impact strength and low moisture absorption. PE1000 Annealed is also food compliant for all critical processing applications.

Properties

- Excellent wear resistance and sliding properties
- High impact strength
- Wide temperature range (+80 to -200°C)
- Low coefficient of friction
- Very low moisture absorption <0.1%
- Food contact approved

Applications

- Food processing
- Conveyor components
- General machining
- Plant engineering
- Bulk material handling

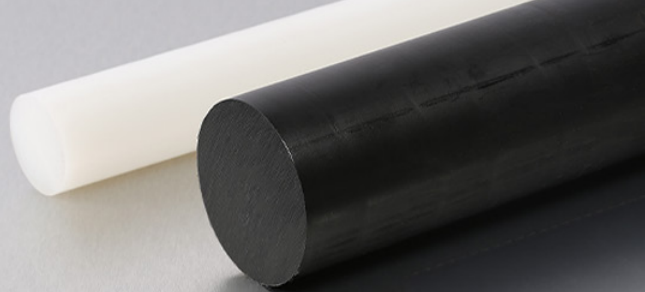
Forms



Solid Rod

PE 1000 Annealed

Technical Properties



Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	DIN EN ISO 1183-1	0.93
Water absorption until saturation at 23°C	%	DIN EN ISO 62	0.1
Maximum service temp. Upper temp limit – short term	°C	-	-
Maximum service temp. Upper temp limit – long term	°C	-	80
Lower temp limit	°C	-	-200
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	DIN EN ISO 527-1/-2	19
Elongation at yield	%	DIN EN ISO 527-1/-2	15
Tensile strength at break	MPa	DIN EN ISO 527-1/-2	>50
Unnotched impact strength	kJ/m ²	DIN EN ISO 179-1/1eU	No break
Notch impact strength	kJ/m ²	DIN EN ISO 179-1/1eA	115P
Ball indentation / Rockwell hardness	MPa	-	-
Shore-D		DIN EN ISO 868	60
Flexural modulus of elasticity	MPa	-	-
Tensile modulus of elasticity	MPa	DIN EN ISO 527-1	750
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	-	80
Heat deflection temperature HDT/B	°C	-	-
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	-	200
Thermal conductivity at 23°C	W/mK	-	0.4
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	IEC 62631-3-1	>10 ¹⁴
Surface resistivity	Ω	ESD STM 11.11	>10 ¹³
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		IEC 62631-2-1	3
Dielectric loss factor at 1MHz		-	-
Dielectric strength	kV/mm	IEC 60243-1	45
Comparative tracking index (CTI)		-	-
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	Yes (Black - EU only)
Food compliance – EU		EU 10/2011	Yes
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		UL 94	HB
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

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