

CENTROPLAST CENTROLEN PE-UHMW Ultra-high molecular weight polyethylene

Category : Polymer , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), UHMW PE Ultra High Molecular Weight

Material Notes:

This plastic is a low density, easily machined material that can be welded and has a low sliding friction with high impact resistance.

Applications include glide strips, pump components, and wearing parts. Information provided by CENTROPLAST Engineering Plastics

GMBH

Order this product through the following link:

http://www.lookpolymers.com/polymer_CENTROPLAST-CENTROLEN-PE-UHMW-Ultra-high-molecular-weight-polyethylene.php

Physical Properties	Metric	English	Comments
Density	0.940 g/cc	0.0340 lb/in ³	ISO 1183
Water Absorption at Saturation	0.010 %	0.010 %	in water at 23°C; ISO 62

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	40.0 MPa	5800 psi	value at 30 sec.; ISO 2039-1
Tensile Strength, Yield	20.0 MPa	2900 psi	v = 50 mm/min; ISO 527-2
Elongation at Break	>= 50 %	>= 50 %	ISO 527-2
Tensile Modulus	0.800 GPa	116 ksi	ISO 527-2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU

Thermal Properties	Metric	English	Comments
CTE, linear	200 µm/m-°C	111 µin/in-°F	ISO 11359
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	0.410 W/m-K	2.85 BTU-in/hr-ft ² -°F	
Melting Point	135 °C	275 °F	10K/min; ISO 3146
Maximum Service Temperature, Air	80.0 °C	176 °F	Long Term
	120 °C	248 °F	Short term
Deflection Temperature at 1.8 MPa (264 psi)	42.0 °C	108 °F	ISO 75-2
Vicat Softening Point	80.0 °C	176 °F	VST/B/50; ISO 306
Minimum Service Temperature, Air	-200 °C	-328 °F	
	HB	HB	

Thermal Properties	Metric	English	Comments
	HB	HB	
	@Thickness 3.00 mm	@Thickness 0.118 in	
	@Thickness 6.00 mm	@Thickness 0.236 in	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Constant	2.3	2.3	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	3.0	3.0	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	45.0 kV/mm	1140 kV/in	in transformer oil; IEC 60243-1
Dissipation Factor	0.00040	0.00040	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.0010	0.0010	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112

Descriptive Properties	Value	Comments
Food Compliance	yes	BGVV
	yes	FD A

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China