Murtfeldt Murylon® HT Nylon 46

Category : Polymer , Thermoplastic , Nylon , Nylon 46 , Nylon 46, Unreinforced

Material Notes:

The use of this highly temperature resistant polyamide enables reliable operation up to a constant service temperature of 155°C . The material retains its rigidity and creep strength over the entire temperature range far better than other Murylon® types.Special Properties:• Highly wear-resistant and good slide properties, especially at high temperatures• Good resistance to thermal aging• High creep resistanceInformation provided by Murtfeldt Kunststoffe GmbH & Co. KG.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Murtfeldt-Murylon-HT-Nylon-46.php

Physical Properties	Metric	English	Comments
Density	1.18 g/cc	0.0426 lb/in³	ISO 1183-1
Moisture Absorption at Equilibrium	2.8 % @Temperature 23.0 °C	2.8 % @Temperature 73.4 °F	50% RH
Water Absorption at Saturation	9.5 % @Temperature 23.0 °C	9.5 % @Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	92	92	ISO 2039-2
Hardness, Shore D	80	80	DIN 53505
Ball Indentation Hardness	165 MPa	23900 psi	ISO 2039-1
Tensile Strength, Yield	55.0 MPa	7980 psi	50% RH; ISO 527-1/-2
	105 MPa	15200 psi	dry; ISO 527-1/-2
Elongation at Break	25 %	25 %	dry; ISO 527-1/-2
	>= 100 %	>= 100 %	50% RH; ISO 527-1/-2
Creep Strength	7.50 MPa	1090 psi	stress leading to 1% elongation; 50% RH; ISO 899-1
	22.0 MPa	3190 psi	stress leading to 1% elongation; dry; ISO 899-1
Modulus of Elasticity	1.35 GPa	196 ksi	50% RH
	3.40 GPa	493 ksi	dry
Compressive Yield Strength	23.0 MPa @Strain 1.00 %	3340 psi @Strain 1.00 %	dry; ISO 604

Mechanical Properties	Metric	English	Comments
	45.0 MPa @Strain 2.00 %	6530 psi @Strain 2.00 %	dry; ISO 604
	94.0 MPa @Strain 5.00 %	13600 psi @Strain 5.00 %	dry; ISO 604
Charpy Impact Unnotched	NB	NB	ISO 179-1/1eU
	NB	NB	ISO 179
Charpy Impact, Notched	0.800 J/cm²	3.81 ft-lb/in²	ISO 179-1/1eA
Coefficient of Friction, Dynamic	0.34	0.34	

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 µm/m-°C @Temperature 23.0 - 60.0 °C	44.4 µin/in-°F @Temperature 73.4 - 140 °F	
	90.0 µm/m-°C @Temperature 23.0 - 100 °C	50.0 µin/in-°F @Temperature 73.4 - 212 °F	
Melting Point	290 °C	554 °F	ISO 11357-1
Maximum Service Temperature, Air	130 °C @Time 7.20e+7 sec	266 °F @Time 20000 hour	
	150 °C @Time 1.80e+7 sec	302 °F @Time 5000 hour	
	200 °C @Time <=86400 sec	392 °F @Time <=24.0 hour	
Minimum Service Temperature, Air	-40.0 °C	-40.0 °F	
Glass Transition Temp, Tg	80.0 °C	176 °F	ISO 11357-1
Flammability, UL94	HB	HB	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	>= 1.00e+12 ohm-cm	>= 1.00e+12 ohm-cm	50% RH; IEC 60093
	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	dry; IEC 60093
Surface Resistance	>= 1.00e+12 ohm	>= 1.00e+12 ohm	50% RH; IEC 60093
	>= 1.00e+13 ohm	>= 1.00e+13 ohm	dry; IEC 60093

Electrical Properties	Metric	English	Comments
Dielectric Constant	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	dry; IEC 60250
	3.5 @Frequency 100 Hz	3.5 @Frequency 100 Hz	dry; IEC 60250
	3.8 @Frequency 1.00e+6 Hz	3.8 @Frequency 1.00e+6 Hz	50% RH; IEC 60250
	7.4 @Frequency 100 Hz	7.4 @Frequency 100 Hz	50% RH; IEC 60250
Dielectric Strength	15.0 kV/mm	381 kV/in	50% RH; IEC 60243-1
	25.0 kV/mm	635 kV/in	dry; IEC 60243-1
Dielectric Loss Index	0.0090 @Frequency 100 Hz	0.0090 @Frequency 100 Hz	dry; IEC 60250
	0.019 @Frequency 1.00e+6 Hz	0.019 @Frequency 1.00e+6 Hz	dry; IEC 60250
	0.060 @Frequency 1.00e+6 Hz	0.060 @Frequency 1.00e+6 Hz	50% RH; IEC 60250
	0.13 @Frequency 100 Hz	0.13 @Frequency 100 Hz	50% RH; IEC 60250

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	

Descriptive Properties	Value	Comments
Color	Auburn	

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