

Murtfeldt Murlubric® Oil Modified Nylon 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Cast

Material Notes:

Murlubric® is a modified cast polyamide that mineral oil is integrated into during polymerization. As a result, the material has self lubricating properties and retains its excellent characteristics for its entire lifetime. Special Properties: • Excellent slide properties • Wear-resistant, even in abrasive applications • High mechanical strength • Self-lubricating • Vibration-free running • Low residual stress • Good lubricant resistance • High dynamic load-bearing capacity
Information provided by Murtfeldt Kunststoffe GmbH & Co. KG.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Murtfeldt-Murlubric-Oil-Modified-Nylon-6.php

Physical Properties	Metric	English	Comments
Density	1.135 g/cc	0.04100 lb/in ³	ISO 1183-1
Moisture Absorption at Equilibrium	2.0 % @Temperature 23.0 °C	2.0 % @Temperature 73.4 °F	50% RH
Water Absorption at Saturation	6.3 % @Temperature 23.0 °C	6.3 % @Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	82	82	dry; ISO 2039-2
Hardness, Shore D	75	75	DIN 53505
Ball Indentation Hardness	145 MPa	21000 psi	dry; ISO 2039-1
Tensile Strength	72.0 MPa	10400 psi	ISO 527-1
Elongation at Break	25 %	25 %	ISO 527-1
Creep Strength	18.0 MPa @Time 3.60e+6 sec	2610 psi @Time 1000 hour	stress leading to 1% elongation; dry; ISO 899-1
Modulus of Elasticity	3.00 GPa	435 ksi	
Compressive Yield Strength	22.0 MPa @Strain 1.00 %	3190 psi @Strain 1.00 %	dry; ISO 604
	43.0 MPa @Strain 2.00 %	6240 psi @Strain 2.00 %	dry; ISO 604
	79.0 MPa @Strain 5.00 %	11500 psi @Strain 5.00 %	dry; ISO 604

Charpy Impact Unnotched Mechanical Properties	5.00 J/cm ² Metric	23.8 ft-lb/in ² English	dry; ISO 179-1/1eU Comments
	>= 5.00 J/cm ²	>= 23.8 ft-lb/in ²	ISO 179
Charpy Impact, Notched	0.400 J/cm ²	1.90 ft-lb/in ²	dry; ISO 179-1/1eA
Coefficient of Friction, Dynamic	0.18	0.18	
Sand Slurry	0.050	0.050	µm/km

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 µm/m-°C	44.4 µin/in-°F	
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature 23.0 - 100 °C	@Temperature 73.4 - 212 °F	
Thermal Conductivity	0.280 W/m-K	1.94 BTU-in/hr-ft ² -°F	
Melting Point	215 °C	419 °F	ISO 11357-1
Maximum Service Temperature, Air	90.0 °C	194 °F	
	@Time 7.20e+7 sec	@Time 20000 hour	
	105 °C	221 °F	
	@Time 1.80e+7 sec	@Time 5000 hour	
Minimum Service Temperature, Air	165 °C	329 °F	
	@Time <=86400 sec	@Time <=24.0 hour	
Glass Transition Temp, Tg	50.0 °C	122 °F	ISO 11357-1
Flammability, UL94	HB	HB	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	dry; IEC 60093
Surface Resistance	>= 1.00e+13 ohm	>= 1.00e+13 ohm	dry; IEC 60093
Dielectric Constant	3.1	3.1	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	dry; IEC 60250
	3.5	3.5	dry; IEC 60250

Electrical Properties	@Frequency 100 Hz Metric	@Frequency 100 Hz English	Comments
Dielectric Strength	22.0 kV/mm	559 kV/in	dry; IEC 60243-1
Dielectric Loss Index	0.015 @Frequency 100 Hz	0.015 @Frequency 100 Hz	dry; IEC 60250
	0.016 @Frequency 1.00e+6 Hz	0.016 @Frequency 1.00e+6 Hz	dry; IEC 60250

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	

Descriptive Properties	Value	Comments
Color	Black	

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