

Contains a blended wax lubrication system uniformly distributed to radically improve wear resistance and coefficient of friction characteristics. The material has excellent mechanical, thermal and electrical properties and exhibits outstanding pressure velocity capabilities. Particularly suited to dry running bearing applications.

PROPERTY	TEST METHOD	NOTES	METRIC UNITS		IMPERIAL UNITS	
GENERAL						
Colour					Grey Red	
Density	ISO1183:1987	Test Method A	g/cm ³	1.141	lb/inch ³	0.041
Moisture Absorption (Equilibrium)	ISO 62:1999	50% RH, 23C	%	2	%	2
Water Absorption (24 Hours)	ISO 62:1999 (modified)	Immersion, 23C	%	0.2	%	0.2
Water Absorption (Saturation)	ISO 62:1999	Immersion, 23C	%	5.9	%	5.9
FDA Compatibility		YES				

MECHANICAL						
Tensile strength	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	MPa	80-90	psi	11603-13053
E-modulus	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	MPa	3600-4000	psi	522135-580152
Elongation at break	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	%	>30	%	>30
Compressive Strength	ISO 604:2002	Sample Type B, 5mm min ⁻¹	MPa	105-125	psi	15229-18129
Compressive Modulus	ISO 604:2002	Sample Type A, 1mm min ⁻¹	MPa	2500-2700	psi	362594-391601
Flexural Strength*	ISO 178:2001	1.5mm min ⁻¹	MPa	115-125	psi	16679-18129
Flexural Modulus	ISO 178:2001	1.5mm min ⁻¹	MPa	3350-3600	psi	485876-522135
Izod Impact Strength	ISO 180:2000	Sample Type A (Notched)	KJ/m ²	5.5-7	ft.lb/in ²	2.62-3.33
Charpy Impact Strength	ISO 179-2:1999	Notched	KJ/m ²	-	ft.lb/in ²	-
Hardness (Shore D)	ISO 868:2003	-	-	83	-	83
Coefficient of Friction (Dynamic)	-	31.4m/min, 1.75MPa	-	0.075	-	0.10
Limiting PV	-	-	MPa/m.min	100	psi.ft/min	-
Wear Rate	-	31.4m/min, 1.75MPa	mg/km	0.02	-	-
K-Factor	-	31.4m/min, 1.75MPa	mm ³ /Nm	3.9 x 10 ⁻⁶	in ³ .min./ft.lb.hr	1.90 x 10 ⁻⁴

THERMAL						
Melting Temperature	-	-	°C	222	°F	432
Glass Transition Temperature (Tg)	ISO 11359-2:1999	-	°C	65	°F	149
Heat Deflection Temperature HDT/A	ISO 75	1.80MPa	°C	75	°F	167
Heat Deflection Temperature HDT/B	ISO 75	0.45MPa	°C	-	°F	-
Maximum Intermittent Service Temperature	-	-	°C	180	°F	356
Maximum Continuous Service Temperature	-	5000hrs	°C	110	°F	230
Minimum Intermittent Service Temperature	-	-	°C	-100	°F	-148
Minimum Continuous Service Temperature	-	-	°C	-40	°F	-40
Coefficient of Linear Thermal Expansion (TMA)	ISO 11359-2:1999	23°C - 55°C	°C ⁻¹	8 x 10 ⁻⁵	°F ⁻¹	4.44 x 10 ⁻⁵
Thermal Conductivity	ISO 8301:1991	Mean T = 20°C	W/m.°C	0.25	BTU in/ft.hr.°F	0.14
Flammability	IEC 60695-11-10:2003-08	-	-	HB	-	HB

ELECTRICAL						
Dielectric Constant	IEC 60250:1969-01	1MHz	-	3.7	-	3.7
Dielectric Constant (Low Frequency)	-	100Hz	-	4	-	4
Dissipation Factor	IEC 60250:1969-01	100 Hz	Hz	0.013	Hz	0.013
Dielectric Strength	IEC 60243-1:1998-01	-	kV/mm	25	kV/in	635
Volume Resistivity	IEC 60093:1980-01	-	ohm.m	>1 x 10 ¹³	ohm.in	3.93 x 10 ¹⁴
Surface Resistivity ROA	IEC 60093:1980-01	-	ohm	>1 x 10 ¹²	ohm	1 x 10 ¹²
Comparative Tracking Index	IEC 60112:2003-01	-	CTI	600	CTI	600

AVAILABILITY



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