

FTL216

The specific properties of this virgin crystalline PETP incorporating a uniformly dispersed solid lubricant. Its specific formulation makes it a premium internally lubricated bearing-grade. FTL216 not only has got an outstanding wear resistance, but offers in comparison with FTL212 an even lower coefficient of friction as well as higher pressure-velocity capabilities.

PROPERTIES	Test methods	Units	Values
Colour	-	-	Pale Grey
Density	ISO 1183-1	g/cm ³	1.44
<i>Water absorption</i>			
-after 24/96 h immersion in water of 23 °C	ISO 62	mg	5/11
	ISO 62	%	0.06/0.13
-At saturation in air of 23 °C/50 % RH	-	%	0.23
-At saturation in water of 23 °C	-	%	0.47

Thermal Properties	Test methods	Units	Values
Melting Temperature	ISO 11357-1/-3	°C	245
Glass transition temperature	ISO 11357-1/-2	°C	-
Thermal conductivity at 23 °C	-	W/(K.m)	0.29
<i>Coefficient of linear thermal expansion:</i>			
-Average value between 23 and 60 °C	-	m/(m.K)	65 X 10 ⁻⁶
-Average value between 23 and 100 °C	-	m/(m.K)	85 X 10 ⁻⁶
<i>Temperature of deflection under load:</i>			
-Method A: 1.8 MPa	+ISO 75-1/-2	°C	75
<i>Max. allowable service temperature in air.</i>			
-For short periods	-	°C	160
-Continuously: for 5000/20000 h	-	°C	115/100
Min. service temperature	-	°C	-20
<i>Flammability:</i>			
-Oxygen Index	ISO 4589-1/-2	%	25
-According to UL 94 (3/6 mm thickness)	-	-	HB/HB

Mechanical Properties at 23 °C	Test methods	Units	Values
<i>Tension test:</i>			
-Tensile stress at yield/tensile stress at break	+ ISO 527-1/-2	MPa	76/-
	++ ISO 527-1/-2	MPa	76/-
-Tensile strength	+ ISO 527-1/-2	MPa	76
-Tensile strain at yield	+ ISO 527-1/-2	%	4
-Tensile strain at break	+ ISO 527-1/-2	%	5
	++ ISO 527-1/-2	%	5
-Tensile modulus of elasticity	+ ISO 527-1/-2	MPa	3300
	++ ISO 527-1/-2	MPa	3300
<i>Compression test:</i>			
-compressive stress at 1/2/5 % normal strain	+ ISO 604	MPa	30/60/102
Charpy impact strength - Unnotched	+ ISO 179-1/1eU	kJ/m ²	30
Charpy impact strength - Notched	+ISO 179-1/1eA	kJ/m ²	2.5
Ball indentation hardness	+ISO 2039-1	N/mm ²	160
Rockwell hardness	+ISO 2039-2	-	M 94

Electrical Properties at 23 °C	ISO 243	Units	Values
Electric strength	+ IEC 602436-1	kV/mm	21