



UHMW Oil Filled

Physical Properties

Property	Method	SI Unit	SI Value	English Unit	English Value
Density	ASTM D-792	kg/m ³	927-938	lbs/ft ³	57.8-58.5
Yield Point	ASTM D-638	MPa	17.8-18.4	psi	2580-2670
Elongation at Yield	ASTM D-638	%	12-18	%	12-18
Ten sile Break	ASTM D-638	MPa	50	psi	7252
Elongation at Break	ASTM D-638	%	280	%	280
Ten sile Modulus	ASTM D-638	MPa	524	psi	76000
Flexural Modulus	ASTM D-790	MPa	440	psi	63818
Izod Impact (Double Notch)	ASTM D-4020	kJ/m ²	76	ft-lbs/in ²	36.2
Ten sile Impact	DIN 53448	kJ/m ²	2868	ft-lbs/in ²	1366
Sand Wheel Wear	ASTM G-65,	T-1000=100	110	T-1000=100	110
Hardness	ASTM D-2240	Shore D	65	Shore D	65
Static Friction	ASTM D-1894	Unitless	0.21	Unitless	0.21
Dynamic Friction	ASTM D-1894	Unitless	0.14	Unitless	0.14
Coefficient of Thermal Exp.	ASTM D-696	^o C ⁻¹	0.00018	^o F ⁻¹	0.00011
Melt Point	ASTM D-3417	^o C	137-143	^o F	278-289
Compressive Modulus	ASTM D-695	MPa	290	psi	42062
Compressive Deformation	ASTM D-621	% at 454.5 kg	na	% at 1000 psi	na
Volume Resistivity	ASTM D-257	Ohm-cm	>10 ¹⁵	Ohm-cm	>10 ¹⁵
Surface Resistivity	ASTM D-257	Ohm	>10 ¹⁵	Ohm	>10 ¹⁵
Water Absorption	ASTM D-570	%	nil	%	nil

* Values are averages and are not specifications.

** ASTM test methods are under current procedures.

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