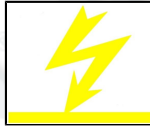


PRODUCT INFORMATION
OKULEN[®] 2000 Tough Black - FN9694

OKULEN[®] 2000 - Tough Black - FN9694 is an exceptionally wear-resistant material (UHMW-PE with 7 - 9 million g/mol). Its special formulation gives the material a very high wear resistance. A low coefficient of sliding friction, long oxidation resistance and UV protection make it suitable for a wide range of applications.

Properties:

- extremely wear resistant
- good sliding properties
- antistatic reduced (AST)
- UV - stabilized
- good chemical resistance
- low maintenance
- improved life time compared to standard UHMW-PE
- heat stabilized
- EU1935/2004 - conform
- EU10/2011 - conform

Colour:

Graphite black FN9694

Range of applications:

- Lining
- Conveyor industry

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PRODUCT INFORMATION
OKULEN® 2000 Tough Black - FN9694

Characteristics and standard values

Properties	Method	OKULEN® 2000 Tough Black - FN9694	
		SI	US
Physical properties			
Molecular-weight	k.a.	7.0 - 9.0 Mio. g/mol.	7.0 - 9.0 Mio. g/mol.
Density	DINENISO 1183-1 (09/2019) ASTM D792	> 0.945 g/cm ³	> 58.994 lb/ft ³
Notched impact strength	DINENISO 21304-2 (04/2021)	70 kJ/m ²	33.285 ft-lb/in ²
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	~ 80	~ 80
Tensile strength at yield (1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 17 N/mm ²	> 2465 psi
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Elongation (Break / 1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 200 %	> 200 %
Tensile-E-modulus (1B - 1mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 650 N/mm ²	> 94250 psi
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Static Friction	ASTM D 1894 (2014)	~ 0.14	~ 0.14
Dynamic Friction	ASTM D 1894 (2014)	~ 0.09	~ 0.09
Shore-D-Hardness, 3 sec. value 6 mm plate	DINENISO 868 (10/2003)	65 - 70 D	65 - 70 D
Ball indentation hardness	DINENISO 2039	~ 38 N/mm ²	~ 5510 psi
Water absorption	DINENISO 62 (05/2008)	< 0.1 %	< 0.1 %
Thermal properties			
Melting Point (DSC)	DINENISO 11357-1 (03/2010)	135 - 137 °C	275 - 278.6 °F
Thermal Conductivity	Wire method	~ 0.41 W/m*K	~ 2.84253 (BTU-in)/hr-ft ² -°F
Max. operation temperature	Literature	~ 85 °C	~ 185 °F
Coefficient of thermal expansion (23 - 80°C)	ISO 11359	~ 0.00015 - 0.00020 mm/mm °C	~ 0.000083 - 0.000111 in/in °F
Electrical properties			
Volume resistivity	DINEN 62631-3-1 (01/2017)	< 1.0E5 Ohm*cm	< 1.0E5 Ohm*cm
Surface resistivity	DINEN 62631-3-2 (10/2016)	< 1.0E5 Ohm	< 1.0E5 Ohm
ATEX-Directive - TÜV approved!	ATEX-Directive	---	---
ESD-D	---	--- Ohm	--- Ohm
Burning properties			
Fire resistance (Self-classification)	DIN 4102	B2 Klasse	B2 Class
Fire resistance (Self-classification)	UL94	HB Klasse	HB Class
Physiological properties			
Food compliant		EU	EU

The above data are based on the present knowledge and are given without guarantee. Existing laws and conditions are to be respected by the user of our products. The decision about the suitability of a material for a certain application must be made by the user. We reserve the right to alter the indicated data. The indicated values are for a 15 mm thick sheet, unannealed. Black sheets may have antistatic properties.