PRODUCT INFORMATION
OKULEN® 2000 - OPV - blue - FN5860

OKULEN® OK 2000 – OPV – FN5860 is an UHMW-PE Polymer (7 - 9 mio. g/mol). It has excellent gliding properties.
It is used in conveyor systems with higher speeds, where a standard UHMW-PE is no longer sufficient. The friction e.g. between conveyor chain and sliding plate or that of plain bearings is greatly reduced so that the energy costs and maintenance costs are also reduced.

Properties:

- Excellent sliding material
- Extremely low coefficient of friction
- Integrated dry lubricant
- Noise reduction
- Reduced maintenance costs
- EU1935/2004 - conform
- EU10/2011 - conform
- FDA - conform

Colour: blue FN5860 / simillar RAL 5015

Range of applications:

- Mechanical industry
- Conveying industry

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Characteristics and standard values

Properties	Method	OKULEN® 2000 - OPV - blue - FN5860	
Physical properties		**SI**	**US**
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	> 0.93 g/cm³	> 58.058 lb/ft³
Notched impact strength	DINENISO 21304-2 (04/2021)	> 100 kJ/m²	> 47.55 ft-lb/in²
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	---	---
Tensile strength at yield (1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 17 N/mm²	> 2465 psi
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Elongation (Break / 1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 350 %	> 350 %
Tensile-E-modulus (1B - 1mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 600 N/mm²	> 87000 psi
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Static Friction	ASTM D 1894 (2014)	~ 0.12	~ 0.12
Dynamic Friction	ASTM D 1894 (2014)	~ 0.09	~ 0.09
Shore-D-Hardness, 3 sec. value 6 mm plate	DINENISO 868 (10/2003)	60 - 63 D	60 - 63 D
Ball indentation hardness	DINENISO 2039	~ 35 N/mm²	~ 5075 psi
Water absorption	DINENISO 62 (05/2008)	< 0.01 %	< 0.01 %
Thermal properties			
Melting Point (DSC)	DINENISO 11357-1 (03/2010)	133 - 135 °C	271.4 - 275 °F
Thermal Conductivity	Wire method	~ 0.41 W/m*K	~ 2.84253 (BTU-in)/hr-ft²-°F
Max. operation temperature	Literature	~ 80 °C	~ 176 °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)	> 1E14 Ohm*cm	> 1E14 Ohm*cm
Surface resistivity	DINEN 62631-3-2 (10/2016)	> 1E13 Ohm	> 1E13 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/FDA	EU/FDA

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