PRODUCT INFORMATION
OKULEN® 2000 - blue 5893

OKULEN® OK 2000 – Blue 5893 is a Ultra-High-Molecular-Weight-PolyEthylene (UHMW-PE polymer). By adding of special additives it possesses a low coefficient of friction. The improved low coefficient of friction (non-stick surface) makes this material ideal for gliding applications.

Properties:

- excellent sliding properties
- low coefficient of friction
- good notched impact strength
- very good wear resistance
- UV-stabilized
- EU1935/2004 - konform
- EU10/2011 - konform
- FDA - konform

Colour: blue FN5893 / simillar RAL 5019

Range of applications:

- Conveyor industry
- Lining applications

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Characteristics and standard values

Properties	Method	OKULEN® 2000 - blue 5893	
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 (09/2025) (Method A)	> 0.930 g/cm³	> 58.058 lb/ft³
Notched impact strength	DINENISO 21304-2 (04/2021) (3 mm Double-V-Notch)	> 100 kJ/m²	> 47.55 ft-lb/in²
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	80	80
Tensile strength at yield (A2 - 50mm/Min.)	DINENISO 527-2 (09/2025) ASTM D 638 (2022)	> 17 N/mm²	> 2465 psi
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Elongation (Break / A2 - 50mm/Min.)	DINENISO 527-2 (09/2025) ASTM D 638 (2022)	> 250 %	> 250 %
Tensile-E-modulus (A2 - 1mm/Min.)	DINENISO 527-2 (09/2025) ASTM D 638 (2022)	> 600 N/mm²	> 87000 psi
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Static Friction	ASTM D 1894 (2024) (vs. Steel: Surface roughness Rz2)	~ 0.10 - 0.15	~ 0.10 - 0.15
Dynamic Friction	ASTM D 1894 (2024) (vs. Steel : Surface roughness Rz2)	~ 0.08 - 0.10	~ 0.08 - 0.10
Shore-D-Hardness, 15 sec. value 6 mm plate	DINENISO 868 (10/2003)	61 - 63 D	61 - 63 D
Ball indentation hardness	DINENISO 2039-1 (06/2003)	~ 35 N/mm²	~ 5075 psi
Water absorption	DINENISO 62 (05/2008)	< 0,1 %	< 0.1 %
Thermal properties			
Melting Point (DSC)	DINENISO 11357-3 (09/2025)	135 - 137 °C	275 - 278.6 °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)	> 1.0E14 Ohm*cm	> 1.0E14 Ohm*cm
Surface resistivity	DINEN 62631-3-2 (10/2016)	> 1.0E13 Ohm	> 1.0E13 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

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.

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