

**PRODUCT INFORMATION**  
**OKULEN® 500 - Reg.-UV-black-FN9100**

OKULEN® 500-Reg. (PE-HMW)

High molecular weight low pressure polyethylene with regenerated materials.

Colour: black OK-FN: 9100

## Characteristics and standard values

Properties	Method	OKULEN® 500 - Reg.-UV-black-FN9100	
		SI	US
<b>Physical properties</b>			
Molecular-weight	k.a.	~ 0.5 Mio. g/mol.	~ 0.5 Mio. g/mol.
Density	DINENISO 1183-1 (09/2019) ASTM D792	> 0.955 g/cm <sup>3</sup>	> 59.619 lb/ft <sup>3</sup>
Notched impact strength	DINENISO 21304-2 (04/2021)	10 kJ/m <sup>2</sup>	4.755 ft-lb/in <sup>2</sup>
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	350 - 450	350 - 450
Tensile strength at yield (1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 20 N/mm <sup>2</sup>	> 2900 psi
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Elongation (Break / 1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 150 %	> 150 %
Tensile-E-modulus (1B - 1mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 900 N/mm <sup>2</sup>	> 130500 psi
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Static Friction	ASTM D 1894 (2014)	~ 0,15 - 0,22	~ 0.15 - 0.22
Dynamic Friction	ASTM D 1894 (2014)	~ 0,10 - 0,15	~ 0.10 - 0.15
Shore-D-Hardness, 3 sec. value 6 mm plate	DINENISO 868 (10/2003)	65 - 70 D	65 - 70 D
Ball indentation hardness	DINENISO 2039	50 N/mm <sup>2</sup>	7250 psi
Water absorption	DINENISO 62 (05/2008)	< 0,01 %	< 0.01 %
<b>Thermal properties</b>			
Melting Point (DSC)	DINENISO 11357-1 (03/2010)	133 - 137 °C	271.4 - 278.6 °F
Thermal Conductivity	Wire method	0,41 W/m*K	2.84253 (BTU-in)/hr-ft <sup>2</sup> -°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
<b>Electrical properties</b>			
Volume resistivity	DINEN 62631-3-1 (01/2017)	< 1.0E9 Ohm*cm	< 1.0E9 Ohm*cm
Surface resistivity	DINEN 62631-3-2 (10/2016)	< 1.0E9 Ohm	< 1.0E9 Ohm
ATEX-Directive - TÜV approved!	ATEX-Directive	---	---
ESD-D	---	--- Ohm	--- Ohm
<b>Burning properties</b>			
Fire resistance (Self-classification)	DIN 4102	B2 Klasse	B2 Class
Fire resistance (Self-classification)	UL94	HB Klasse	HB Class
<b>Physiological properties</b>			
Food compliant		---	---

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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