

**PRODUCT INFORMATION**  
**OK 1000 - AST FN9200**

OKULEN® 1000 is an ultra high molecular low pressure polyethylene with a molecular weight > 3.500.000 g/mol.

Colour: black  
 OK-FN:  
 9200

## Characteristics and standard values

Properties	Method	OK 1000 - AST FN9200	
		SI	US
<b>Physical properties</b>			
Molecular-weight	k.a.	5,0 Mio. g/mol.	5.0 Mio. g/mol.
Density	ASTM D792	0,950 g/cm <sup>3</sup>	59.306 lb/ft <sup>3</sup>
Notched impact strength	ISO 11542-2 (01/1999)	100 kJ/m <sup>2</sup>	47.55 ft-lb/in <sup>2</sup>
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2013)	100 - 110 %	100 - 110 %
Tensile strength	ASTM D 638 (2010)	18 N/mm <sup>2</sup>	2610 psi
Breaking strength	ASTM D 638 (2010)	28 N/mm <sup>2</sup>	4060 psi
Elongation (Break)	ASTM D 638 (2010)	> 150 %	> 150 %
Tensile-E-modulus	ASTM D 638 (2010)	700 N/mm <sup>2</sup>	101500 psi
Flexural modulus	ASTM D 790 (2010)		
Static Friction	ASTM D 1894 (2011)	~ 0,15 - 0,20	~ 0.15 - 0.20
Dynamic Friction	ASTM D 1894 (2011)	~ 0,10 - 0,15	~ 0.10 - 0.15
Shore-D-Hardness, 3 sec. value 6 mm plate	ISO 868 (10/2003)	61 - 65 D	61 - 65 D
Ball indentation hardness	ISO 2039	35 N/mm <sup>2</sup>	5075 psi
Water absorption	ISO 62 (05/2008)	< 0,01 %	< 0.01 %
<b>Thermal properties</b>			
Melting Point (DSC)	ISO 11357-1 (03/2010)	133 - 135 °C	271.4 - 275 °F
Thermal Conductivity	Wire method	0,41 W/m*K	2.46 (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	0,00020 mm/mm °C	0.000111 in/in °F
<b>Electrical properties</b>			
Volume resistivity	IEC 60093 (12/1993)	< 1.0E5 Ohm*cm	< 1.0E5 Ohm*cm
Surface resistivity	IEC 60093 (12/1993)	< 1.0E5 Ohm	< 1.0E5 Ohm
Atec-Directive	Atec-Directive	Ja	Ja
ESD-D			
<b>Burning properties</b>			
Fire resistance	DIN 4102	B2 Klasse	B2 Class
Fire resistance	UL 94	HB Klasse	HB Class
<b>Physiological properties</b>			
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.

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