

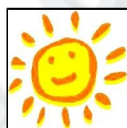
PRODUCT INFORMATION
OKULEN[®] 500 - AST black - FN9200

OKULEN[®] 500 – AST – black – FN 9200 is a permanent conductive modified HMW-PE polymer. This material is used for applications in which it is not allowed to build up static properties. The used additives, type and quantity, meets the cleanliness class FDA §178.3297 (USA) the EU-regulations 1935/2004/EC and 10/2011/EC for “Food contact applications”.

The product fulfills the requirements of the ATEX - Directive for values of resistivity. It was tested on representative samples by the TÜV-Nord (Germany).

Properties:

- Conductive / Antistatic reduced
- ATEX - conform
- TÜV approved
- UV - stabilized
- EU 1935/2004 & EU 10/2011 - conform
- FDA - conform

Colour:

black FN9200 / similar RAL9005

Range of applications:

- Mechanical engineering
- Electronic industry
- Conveying industry
- Explosion-proof zones

PRODUCT INFORMATION
OKULEN® 500 - AST black - FN9200

Characteristics and standard values

Properties	Method	OKULEN® 500 - AST black - FN9200	
		SI	US
Physical properties			
Molecular-weight	k.a.	~ 0.5 Mio. g/mol.	~ 0.5 Mio. g/mol.
Density	DINENISO 1183-1 (09/2019) ASTM D792	0.960 g/cm ³	59.931 lb/ft ³
Notched impact strength	DINENISO 21304-2 (04/2021)	10 kJ/m ²	4.755 ft-lb/in ²
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	360 - 440	360 - 440
Tensile strength at yield (1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 25 N/mm ²	> 3625 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)	> 1000 N/mm ²	> 145000 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 ²	7250 psi
Water absorption	DINENISO 62 (05/2008)	< 0,01 %	< 0.01 %
Thermal properties			
Melting Point (DSC)	DINENISO 11357-1 (03/2010)	133 - 136 °C	271.4 - 276.8 °F
Thermal Conductivity	Wire method	~ 0.41 W/m*K	~ 2.84253 (BTU-in)/hr-ft ² -°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)	< 1.0E5 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	Ja / Yes	Ja / Yes
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.