

PRODUCT INFORMATION
OKULEN® 500 natural - FN0000

OKULEN® 500 natural - FN0000 is a high molecular low pressure polyethylene with a molecular weight of approx. 500.000 g/mol. (HMW-PE).

Properties:

- EU1935/2004 & 10/2011 - conform
- FDA - conform

Colour:

natural FN0000

Range of applications:

- Food industry
- Chemical industry

Ottensteiner Kunststoff GmbH & Co. KG

Im Garbrock 39, 48683 Ahaus-Ottenstein
Germany

Phone: +49 (0) 2561-9824-0

Internet: www.okulen.come-mail: info@okulen.com

PRODUCT INFORMATION
OKULEN® 500 natural - FN0000

Characteristics and standard values

Properties	Method	OKULEN® 500 natural - FN0000	
		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	0.950 g/cm ³	59.306 lb/ft ³
Notched impact strength	DINENISO 21304-2 (04/2021)	19 kJ/m ²	9.0345 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)	> 26 N/mm ²	> 3770 psi
	---	---	---
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)	> 1000 N/mm ²	> 145000 psi
	---	---	---
Static Friction	ASTM D 1894 (2014)	~ 0.15 - 0.20	~ 0.15 - 0.20
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 - 67 D	65 - 67 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)	> 1.0E+14 Ohm*cm	> 1.0E+14 Ohm*cm
Surface resistivity	DINEN 62631-3-2 (10/2016)	> 1.0E+13 Ohm	> 1.0E+13 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

Ottensteiner Kunststoff GmbH & Co. KG

Im Garbrock 39, 48683 Ahaus-Ottenstein Germany

Phone: +49 (0) 2561-9824-0

Internet: www.okulen.com

e-mail: info@okulen.com