

**PRODUCT INFORMATION**  
**OKUSLIDE<sup>®</sup> Tough Blue - FN5874**

OKUSLIDE<sup>®</sup> Tough Blue – FN5874 is an exceptionally wear-resistant material (UHMW-PE with 7 - 9 million g/mol). Its special formulation gives the material a very high wear resistance. A low coefficient of sliding friction, a long oxidation resistance and simultaneous UV protection allow the application in a variety of applications.

**Properties:**

- extremely wear resistant
- good sliding properties
- good chemical resistance
- low maintenance
- improved life time compared to standard UHMW-PE
- heat stabilized
- EU1935/2004 - conform
- EU10/2011 - conform

**Colour:**

light blue FN5874

**Range of applications:**

- Lining
- Conveyor industry

**Ottensteiner Kunststoff GmbH & Co. KG**

Im Garbrock 39, 48683 Ahaus-Ottenstein Germany

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

Internet: [www.okulen.com](http://www.okulen.com)e-mail: [info@okulen.com](mailto:info@okulen.com)

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**OKUSLIDE® Tough Blue - FN5874**

## Characteristics and standard values

Properties	Method	OKUSLIDE® Tough Blue - FN5874	
		SI	US
<b>Physical properties</b>			
Molecular-weight	k.a.	7.0 - 9.0 Mio. g/mol.	7.0 - 9.0 Mio. g/mol.
Density	DINENISO 1183-1 (09/2019) ASTM D792	> 0.945 g/cm <sup>3</sup>	> 58.994 lb/ft <sup>3</sup>
Notched impact strength	DINENISO 21304-2 (04/2021)	> 100 kJ/m <sup>2</sup>	> 47.55 ft-lb/in <sup>2</sup>
Abrasion-Index (Sand-Slurry)	DINENISO 15527 (05/2022)	~ 80	~ 80
Tensile strength at yield (1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 17 N/mm <sup>2</sup>	> 2465 psi
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Elongation (Break / 1B - 50mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 250 %	> 250 %
Tensile-E-modulus (1B - 1mm/Min.)	DINENISO 527-2 (06/2012) ASTM D 638 (2010)	> 650 N/mm <sup>2</sup>	> 94250 psi
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Static Friction	ASTM D 1894 (2014)	~ 0.14	~ 0.14
Dynamic Friction	ASTM D 1894 (2014)	~ 0.09	~ 0.09
Shore-D-Hardness, 3 sec. value 6 mm plate	DINENISO 868 (10/2003)	65 - 70 D	65 - 70 D
Ball indentation hardness	DINENISO 2039	~ 38 N/mm <sup>2</sup>	~ 5510 psi
Water absorption	DINENISO 62 (05/2008)	< 0.1 %	< 0.1 %
<b>Thermal properties</b>			
Melting Point (DSC)	DINENISO 11357-1 (03/2010)	135 - 137 °C	275 - 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)	> 1.0E14 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
<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		EU	EU

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