

**PRODUCT INFORMATION**  
**OK 1000 Reg.- AST**

OKULEN® 1000-Reg. (PE-HMW) High molecular weight low pressure polyethylene with regenerated materials. We guarantee constant quality levels for regenerated materials!

Colour: black  
 OK-FN:  
 9200

## Characteristics and standard values

| Properties                                   | Method                   | OK 1000 Reg.- AST       |                                      |
|----------------------------------------------|--------------------------|-------------------------|--------------------------------------|
|                                              |                          | SI                      | US                                   |
| <b>Physical properties</b>                   |                          |                         |                                      |
| Molecular-weight                             | k.a.                     | 3,5 Mio. g/mol.         | 3.5 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)    | 70 kJ/m <sup>2</sup>    | 33.285 ft-lb/in <sup>2</sup>         |
| Abrasion-Index (Sand-Slurry)                 | DINENISO 15527 (05/2013) | 130 - 150 %             | 130 - 150 %                          |
| Tensile strength                             | ASTM D 638 (2010)        | 20 N/mm <sup>2</sup>    | 2900 psi                             |
| Breaking strength                            | ASTM D 638 (2010)        | 20 N/mm <sup>2</sup>    | 2900 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)       | ~ 0,16 - 0,22           | ~ 0.16 - 0.22                        |
| Dynamic Friction                             | ASTM D 1894 (2011)       | ~ 0,10 - 0,16           | ~ 0.10 - 0.16                        |
| Shore-D-Hardness, 3 sec. value 6 mm plate    | ISO 868 (10/2003)        | 62 - 67 D               | 62 - 67 D                            |
| Ball indentation hardness                    | ISO 2039                 | 36 N/mm <sup>2</sup>    | 5220 psi                             |
| Water absorption                             | ISO 62 (05/2008)         | < 0,01 %                | < 0.01 %                             |
| <b>Thermal properties</b>                    |                          |                         |                                      |
| Melting Point (DSC)                          | ISO 11357-1 (03/2010)    | 133 - 137 °C            | 271.4 - 278.6 °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)      | < 1.0E6 Ohm*cm          | < 1.0E6 Ohm*cm                       |
| Surface resistivity                          | IEC 60093 (12/1993)      | < 1.0E6 Ohm             | < 1.0E6 Ohm                          |
| Atec-Directive                               | Atec-Directive           |                         |                                      |
| 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                               |                          | ---                     | ---                                  |

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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