

Versatile and economical Polyethylene for use in food industry, among others

ISO	PE-HMW polyethylene, high molecular weight
Shape	Sheet
Color	Black
Temperature Range	-100 and 80 °C
<u>tbl temp melting</u>	135 °C
Density	960 kg/m3
Maximum pressure	135 bar
Hardness	62 Rockwell M
Flame Resistance (UL 94)	HB

Material information

Basic Polyethylene suitable for many general applications due to a good combination of stiffness and strength. The material is also relatively wear resistant compared to PE1000 and has good chemical resistance.



FDA

European Food Grade according to EC 1935:2004 USA Food Grade under FDA

Usage examples

Food industry is used (meat and fish processing) but it is also used in all kinds of mechanical, chemical and electrical applications. including tanks or, for example, drip trays. Also suitable as collision protection.

Processing

Excellent sawing and processing
Measurement tolerance 2768-mK

Item Overview

Item Code	Item Name	Width (mm)	Length (mm)
61800020	PE-HMW 500 zwart 2 mm		
61800030	PE-HMW 500 zwart 3 mm		
61800040	PE-HMW 500 zwart 4 mm		
61800050	PE-HMW 500 zwart 5 mm		
61800060	PE-HMW 500 zwart 6 mm		
61800080	PE-HMW 500 zwart 8 mm		
61800100	PE-HMW 500 zwart 10 mm		
61800120	PE-HMW 500 zwart 12 mm		
61800150	PE-HMW 500 zwart 15 mm		
61800200	PE-HMW 500 zwart 20 mm		
61800250	PE-HMW 500 zwart 25 mm		
61800300	PE-HMW 500 zwart 30 mm		



61800350	PE-HMW 500 zwart 35 mm
61800400	PE-HMW 500 zwart 40 mm
61800450	PE-HMW 500 zwart 45 mm
61800500	PE-HMW 500 zwart 50 mm
61800600	PE-HMW 500 zwart 60 mm
61800700	PE-HMW 500 zwart 70 mm
61800800	PE-HMW 500 zwart 80 mm
61800900	PE-HMW 500 zwart 90 mm
61801000	PE-HMW 500 zwart 100 mm

Water absorption

The extent to which the product absorbs water when tested for 24 hours in water at 23 degrees in accordance with ISO 63.

Immersion Saturation

0,100 % 0,100 %

Thermal properties

[tbl_thermal_explainer](#)

[tbl_thermische_geleiding](#) [tbl_lin_uitzet_2360](#) [tbl_lin_uitzet_23100](#) [tbl_temp_deflection_load](#)

0,400 W/(K.m) 0 x 10-6 m/(m.K) 150 x 10-6 m/(m.K) 44 °C

Mechanical properties

[tbl_mechanical_explainer](#)

[tbl_tension_norm](#) [tbl_tension_stress_yield](#) [tbl_tension_strain_yield](#) [tbl_tension_strain_break](#) [tbl_modulus_elasticity](#)

ISO 527-1/-2 28 MPa 10 % 50 % 1.300 MPa

Impact tests

[tbl_charpy_izod_explainer](#)

[tbl_charpy_impact](#) [tbl_charpy_unnotched](#) [tbl_charpy_notched](#) [tbl_izod_impact](#) [tbl_izod_impact_notched](#)

ISO 179-1 KJ/m² 105 KJ/m² ISO 179-1 0

Dynamische Coefficient of Friction

[tbl_dcf_explainer](#)

[tbl_dcf](#) [tbl_dcf_min](#) [tbl_dcf_max](#) [tbl_dcf_wear](#)

ISO 179-1 0,150 0,300 300 µm/km



Electrical properties

Tests related to the electrical resistivity and conductivity of the material.

Electric strength	Volume resistance	Surface resistance
IEC 60243-1 45 kV/mm	IEC 60093 >10E 14 Ohm.cm	IEC 60093 >10E 13 Ohm/sq.

Related materials

Code	Group Name	Shape	Color
616	PE-HMW 500 naturel	Sheet	color_nat
618	PE-HMW 500 zwart	Sheet	Black

We provide product information as known by us with great care. We cannot accept any liability for errors and/or inaccuracies and/or incompleteness. Please note that our products are intended for professional use only. For high impact applications and/or combinations of limit values we always recommend to have the properties specific to that situation verified by us. If there are multiple specifications for a product we will use the standard of 2mm or the closest specification.

