

High-density polyethylene is a relatively soft and chemically very inert semi-crystalline thermoplastic. Excellent for creating products by welding or thermoforming.

<b>Mechanical properties:</b>		<b>black</b>	<b>natural</b>
Yield stress	DIN EN ISO 527	23 MPa	
Elongation at yield	DIN EN ISO 527	9,00%	
Tensile modulus of elasticity	DIN EN ISO 527	1100 MPa	
Impact strength	DIN EN ISO 179	without break	
Notched impact strength	DIN EN ISO 179	16 kJ/m <sup>2</sup>	
Ball indentation hardness	DIN EN ISO 2039-1	43 MPa	
Shore hardness D (15 s)	DIN EN ISO 868	65	

<b>Thermal properties:</b>		<b>black</b>	<b>natural</b>
Mean coefficient of linear thermal expansion	ISO 11359-2	1,8 x 10 <sup>-4</sup> /K	
Thermal conductivity	DIN 52612	0,38 W/m*K	

<b>Electrical properties:</b>		<b>black</b>	<b>natural</b>
Surface resistivity	DIN IEC 60093	≥10 <sup>14</sup> Ohm	
Dielectric strength	DIN IEC 60243-1	50 kV/mm	

<b>Typical properties:</b>		<b>black</b>	<b>natural</b>
Fire behaviour	DIN 4102 B2	normal entflammbar	
Density	DIN EN ISO1183	0,96 g/cm <sup>3</sup>	0,95 g/cm <sup>3</sup>
Temperature range		-50 bis +80°C	
Weather resistance		✓	✗
Chemical resistance		✓	✓
Physiological safety	BfR	✓	✓
Food compliance	EU	✓	✓
Food compliance	FDA	✗	✓

Delivery options\*: smooth, textured, coloured according to RAL or NCS color scale and as recycled quality.  
 \* not all materials are available from stock; for some, order quantities of >1,000 kg may be required.

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The figures shown are the data of the sheet manufacturers. Values may differ depending on the production batch. This data sheet is not a guarantee for exact compliance with the values!