

Application purpose and characteristics

Environmental and disposal technology, lining technology, cutting boards. Cutting boards and machine parts used in the foodstuff industry (e.g. meat, fish, poultry, and fruit and vegetable processing, etc.) The color red-brown is particularly suitable for processing meat. Excellent mechanical properties, very wear, cutting and scratch resistant, physiologically safe.

Material name, short description	PE-HMW
Material name, based on technical standards	Polyethylen high molecular weight
Density	.96 g/cm ³
Color	red-brown
Compound code	PE-HMW 00.026-01

Mechanical properties

Modulus of elasticity & tension 1	≥ 800 N/mm ² ISO 527
Yield stress	≥ 20 N/mm ² ISO 527
Elongation at break	≥ 500 % ISO 527
Elongation at yield	10 % ISO 527
Hardness test value	63 Shore D
Ball indentation hardness	50 N/mm ² ISO 2039-1
Impact strength	≥ #ErrorkJ/m ² ISO 11542-2 charpy
Notch impact strength	no break ISO 179

Thermal attributes

Min. operating temperature	-60 °C
Max. operating temperature long term	80 °C
Coefficient of linear thermal expansion 1	1.5 - 2.0 * 10 ⁻⁴ K ⁻¹ DIN 53752 +23 bis +80°C
Crystalline melting point	135 °C ISO 3146
Thermal conductivity	0.4 W/(m·K) +23°C

Electrical attributes

Surface resistivity	10 ¹² Ω DIN IEC 60093
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Other attributes

Water absorption	≤ 0.01 %
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Approvals / Compliance

Food & Beverage	FDA CFR 21 - 178.3297 "Colorants for polymers"
	EC No. 1935/2004 incl. last amendments



EC No.1935:2004



In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.