

Application purpose and characteristics

Weldment in laboratory technology and chemical engineering. Transport, handling and storage technology, DIBt compliant for certified tank and equipment construction. For trays and housings for indoor and outdoor use.

UV-stabilized, weather-resistant, high toughness even at low temperatures, creep strength at 50 years, 20 °C Medium water = 10.0 mpa, anti-adhesive surface, high chemical resistance, excellent welding properties.

Material name, short description	PE-HD
Material name, based on technical standards	Polyethylene high density
Density	.96 g/cm ³
Color	black
Compound code	PE-HD 01.005-01

Mechanical properties

Modulus of elasticity & tension 1	1100 N/mm ² DIN EN ISO 527
Yield stress	23 N/mm ² DIN EN ISO 527
Elongation at yield	9 % DIN EN ISO 527
Hardness test value	65 Shore D
Ball indentation hardness	40 N/mm ² DIN EN ISO 2039-1
Impact strength	no break DIN EN ISO 179
Notch impact strength	30.00 kJ/m ² DIN EN ISO 179

Thermal attributes

Min. operating temperature	-50 °C
Max. operating temperature long term	80 °C
Coefficient of linear thermal expansion 1	1.8 * 10 ⁻⁴ K ⁻¹ ISO 11359-2
Thermal conductivity	0.38 W/(m·K) DIN 52612

Electrical attributes

Dielectric strength 1	47 kV/mm DIN EN 60243-1
Surface resistivity	10 ¹⁴ Ω DIN IEC 60093

Approvals / Compliance

Food & Beverage	EC No. 1935/2004 incl. last amendments
	Regulation EU 10/2011 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.