# **APSOplast® PE-UHMW ED FG**



Engineering plastics technology Technical Data Sheet

#### Application purpose and characteristics

Avoidance of electrostatic charge. For very wear and impact resistant slideways or coatings, e.g.for chutes, silos, feed ducts; support rail strips for timing belts and chain guides; for slide bearings and feed systems in machine and apparatus, for components in galvanizing and food processing. extremely impact and wear resistant, very low sliding friction coefficient, anti-adhesive surface, good chemical resistance, extremely low temperature resistant, electrostatically dissipative.

Material name, short description	PE-UHMW
Material name, based on technical standards	Polyethylen ultra high molecular weight
Density	.95 g/cm³
Color	black
Compound code	PE-UHMW ED FG.001-00
Compound	PE-UHMW electrostatic dissipative

#### **Mechanical properties**

Modulus of elasticity & tension 1	700 N/mm² DIN EN ISO 527
Yield stress	22 N/mm² DIN EN ISO 527
Elongation at break	≥ 200 % DIN EN ISO 527
Hardness test value	63 Shore D
Notch impact strength	no break DIN EN ISO 179
Sliding wear	100 Sand-slurry

#### Thermal attributes

Min. operating temperature	-150 °C
Max. operating temperature long term	80 °C
Max. operating temperature short term	130 °C
Coefficient of linear thermal expansion 1	150 - 230 * 10⁻⁵ K⁻¹ DIN 53752
Crystalline melting point	135 °C ISO 11357-3
Heat deflection temperature 1	79 °C DIN EN ISO 306 Vicat B
Specific heat capacity	1.9 J/(g·K) DIN EN ISO 52612-1
Thermal conductivity	0.4 W/(m⋅K) DIN 52612-1

## **Electrical attributes**

Surface resistivity	≤10 <sup>₅</sup> Ω IEC 60093
Volume resistivity	≤10 <sup>6</sup> Ω*cm IEC 60093

### **Approvals / Compliance**

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



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.