

APSOplast® PA 6 MO
**Engineering Plastic Technology
Technical Data Sheet**
Application purpose and characteristics

Mechanical engineering, conveyor industry, vehicle construction
High mechanical strength, high rigidity, high UV resistance

Product description

Material name, long description	Polyamide 6
Material name, short description	PA 6
Material Code	PA 6 MO.001-00
Density	1.14 g/cm ³

Mechanical characteristics

Charpy impact strength	Test value: ≥ 3 kJ/m ² Test norm: DIN EN ISO 179
Ball indentation hardness	Test value: 170 MPa Test norm: DIN EN ISO 2039-1
Elongation at break	Test value: ≥ 50 % Test norm: DIN EN ISO 527
Shore hardness	Test value: 82 Shore D
Yield stress	Test value: 80 MPa Test norm: DIN EN ISO 527
Modulus of elasticity and tension	Test value: 3200 MPa Test norm: DIN EN ISO 527

Thermal characteristics

Min. operating temperature	Test value: -40 °C
Max. operating temperature long term	Test value: 85 °C
Max. operating temperature short term	Test value: 160 °C
Coefficient of linear thermal expansion	Test value: $90 \cdot 10^{-6} \text{K}^{-1}$ Test norm: DIN 53752
Crystalline melting point	Test value: 220 °C Test norm: ISO 11357-3
Specific heat capacity	Test value: 1.7 kJ/kg*K Test norm: DIN 52612
Heat deflection temperature	Test value: 75 °C Test norm: DIN EN ISO 75 / A
Thermal conductivity	Test value: 0.23 W/m·K Test norm: DIN 52612-1

Other characteristics

Flammability	Test value: HB / HB Test norm: UL 94 Test parameter: Thickness 3 mm / 6 mm
Moisture absorption	Test value: 3.0 % Test norm: DIN EN ISO 62