

Technical Data Sheet

Sustarin[®] H black

POM-H

Typical characteristics

- Low moisture absorption
- Good wear resistance
- High mechanical strength
- High stiffness
- Good toughness
- High creep resistant
- Good machinability

Typical industries

- Conveyor Technology & Automation
- Mechanical Engineering Industry
- Electronics
- Oil and Gas
- Hydrogen Energy
- Vehicle Construction

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	1,42
Water absorption	DIN EN ISO 62	%	0,2
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	75
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3200
Notched impact strength	DIN EN ISO 179	kJ / m ²	10
Shore hardness	DIN EN ISO 868	scale D	83
Thermal properties			
Melting temperature	ISO 11357-3	°C	175
Thermal conductivity	DIN 52612-1	W / (m * K)	0,31
Thermal capacity	DIN 52612	kJ / (kg * K)	1,50
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	100
Service temperature, long term	Average	°C	-50 ... 90
Service temperature, short term (max.)	Average	°C	150
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	110
Electrical properties			



	Test method	Unit	Guideline value
Dielectric constant	IEC 60250		3,8
Dielectric dissipation factor (50 Hz)	IEC 60250		0,002
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	10^{15}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{15}
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	25

