Technical Data Sheet

Sustarin® C PIR black

Typical characteristics

- Sustainable Plastic
- Chemical resistant
- Low moisture absorption
- High abrasion resistance
- High tensile strength
- High stiffness
- Good impact strength
- Low creep tendency
- Good machinability
- Good electrical properties
- Good dielectric properties
- Good dimensional stability
- Good sliding properties

Typical industries

- Mechanical Engineering Industry
- Oil and Gas
- Conveyor Technology & Automation
- Electronics
- Vehicle Construction
- Agriculture Industry
- Renewable Energies

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	1,41
Water absorption	DIN EN ISO 62	%	0,2
Flammability	UL 94		HB/HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	65
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	2700
Notched impact strength	DIN EN ISO 179	kJ / m^2	6
Shore hardness	DIN EN ISO 868	scale D	80
Thermal properties			
Melting temperature	ISO 11357-3	°C	165
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	110

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	Test method	Unit	Guideline value
Service temperature, long term	Average	°C	-50...100
Service temperature, short term (max.)	Average	°C	140
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	110
Electrical properties			
Dielectric constant	IEC 60250		3,8
Dielectric dissipation factor (50 Hz)	IEC 60250		0,002
Volume resistivity	DIN EN 62631-3-1	Ω * cm	10^{13}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{13}
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	40

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