

### Technical Data Sheet

## Sustason® PPSU black

PPSU

#### Typical characteristics

- High heat deflection temperature
- Low smoke development
- High tensile strength
- High creep rupture strength
- Good machinability
- good adhesive properties
- Good weldability
- High continuous service temperature
- Electrically insulating
- Good dielectric properties
- High stiffness
- Good thermoformability
- Good impact strength
- Good dimensional stability

#### Typical industries

- Electronics
- Mechanical Engineering Industry

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	1,29
Water absorption	DIN EN ISO 62	%	0,6
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0 / V0
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	77
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	2500
Notched impact strength	DIN EN ISO 179	kJ / m <sup>2</sup>	10
<b>Thermal properties</b>			
Melting temperature	ISO 11357-3	°C	-
Glass transition temperature	ISO 11357-3	°C	220
Thermal conductivity	DIN 52612-1	W / (m * K)	0,35



	Test method	Unit	Guideline value
Coefficient of linear thermal expansion	DIN 53752	$10^{-6} / K$	55
Service temperature, long term	Average	°C	-50 ... 180
Service temperature, short term (max.)	Average	°C	210
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	205
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		3,44
Volume resistivity	DIN EN 62631-3-1	$\Omega * cm$	$10^{15}$
Dielectric strength	IEC 60243	kV / mm	15

