

TECHNICAL DATA SHEET

**THERMEC S 4150R40**

PPS, 40% glass fiber reinforced, for injection moulding

**General**

Polymer type	PPS (Polyphenylene sulfide)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Forms	Pellets		

**Product identification**

ISO 1043 abbreviation	PPS-GF40		
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Condition	Standard	Unit	Value
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**Physical properties**

Density		ISO 1183	g/cm <sup>3</sup>	1.67
Coefficient of thermal expansion - Parallel to flow (2)	70 to 150°C	ISO 11359-2	ppm/°C	30
Coefficient of thermal expansion - Perpendicular to flow (2)	70 to 150°C	ISO 11359-2	ppm/°C	60

**Mechanical properties**

**dam / cond.\***

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	15000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	165 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2.5 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	8 / -

**Thermal properties**

Melting temperature, 10°C/min		ISO 11357-1	°C	280
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	265
Thermal conductivity, through plane		ASTM E1461	W/m.K	0.35
Thermal conductivity, in plane		ASTM E1461	W/m.K	0.3

**Electrical properties**

Volume resistivity		IEC 62631-3-1	ohm.m	1E+012
Surface resistivity		IEC 62631-3-1	ohm	1E+015

Condition

Standard

Unit

Value

## Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		V0
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Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.  
\*: conditioned according to ISO 1110

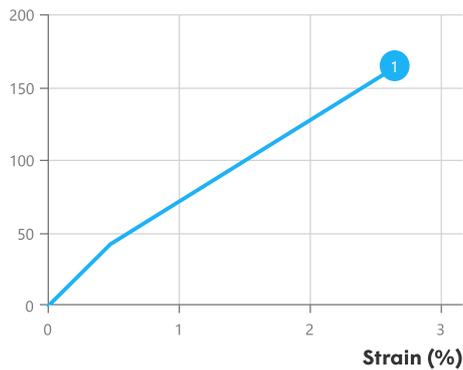
## Processing conditions

Drying temperature/time	130-150 °C / 4-6h
Recommended melt temperature	310 - 340 °C
Recommended mould temperature	140 - 170 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

### Stress-strain, dry

Stress (MPa)



Temperature (°C)

1

Spannung

1