

### Technical Data Sheet

## Sustamid<sup>®</sup> 6 FR black

PA 6

#### Typical characteristics

- Free of halogen and phosphorus
- Self-extinguishing
- Flame retardant
- High hardness
- High rigidity
- Good sliding properties
- Good wear properties
- Good machinability
- Good dimensional stability
- Certified according to EN 45545-2

#### Typical industries

- Vehicle Construction
- Rail Technology and Vehicles

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	1,17
Water absorption	DIN EN ISO 62	%	3,0
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0 / V0
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	82
Elongation at break	DIN EN ISO 527	%	3
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3800
Shore hardness	DIN EN ISO 868	scale D	83
<b>Thermal properties</b>			
Melting temperature	ISO 11357-3	°C	222
Thermal capacity	DIN 52612	kJ / (kg * K)	1,70
Coefficient of linear thermal expansion	DIN 53752	10 <sup>-6</sup> / K	90
Service temperature, long term	Average	°C	-20 ... 85
Service temperature, short term (max.)	Average	°C	160
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	65



	Test method	Unit	Guideline value
<b>Electrical properties</b>			
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	$10^{13}$
Surface resistivity	DIN EN 62631-3-2	$\Omega$	$10^{16}$

