

### Technical Data Sheet

## Sustamid® 6 blue

PA 6

#### Typical characteristics

- Good toughness
- Good noise absorption properties
- Vibration damping
- High absorption of moisture of up to 3 % in standard atmosphere
- High abrasion resistance
- High mechanical strength
- Good impact strength
- good adhesive properties
- Good weldability
- Good machinability
- Good sliding properties

#### Typical industries

- Mechanical Engineering Industry
- Aerospace
- Food Industry
- Meat, Fish and Poultry Processing
- Bakery and Confectionery

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	1,14
Water absorption	DIN EN ISO 62	%	3,0
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	80
Elongation at break	DIN EN ISO 527	%	50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3200
Notched impact strength	DIN EN ISO 179	kJ / m <sup>2</sup>	3
Shore hardness	DIN EN ISO 868	scale D	82
<b>Thermal properties</b>			
Melting temperature	ISO 11357-3	°C	220
Thermal conductivity	DIN 52612-1	W / (m * K)	0,23
Thermal capacity	DIN 52612	kJ / (kg * K)	1,70



	Test method	Unit	Guideline value
Coefficient of linear thermal expansion	DIN 53752	$10^{-6} / K$	90
Service temperature, long term	Average	°C	-40 ... 85
Service temperature, short term (max.)	Average	°C	160
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	75
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		3,9
Dielectric dissipation factor (50 Hz)	IEC 60250		0,02
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	$10^{15}$
Surface resistivity	DIN EN 62631-3-2	$\Omega$	$10^{13}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	20

