

## SUSTAMID® 6G ESD 90

### Product characteristics

- Antistatic
- Good compressive strength
- high mechanical strength

### Product applications

- Packaging industry
- Explosion protection
- Electrical industry

	Test method	Unit	Value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	1,19
Water absorption	DIN EN ISO 62	%	2,5
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	75
Elongation at break	DIN EN ISO 527	%	5
Tensile modulus of elasticity	DIN EN ISO 527	MPa	4000
Notched impact strength	DIN EN ISO 179	kJ / m <sup>2</sup>	3,0
Shore hardness	DIN EN ISO 868	scale D	80
<b>Thermal properties</b>			
Crystalline grain melting range	ISO 11357-3	°C	216
Thermal conductivity	DIN 52612-1	W / (m * K)	0,29
Coefficient of linear thermal expansion	DIN 53752	10 <sup>-6</sup> / K	70
Service temperature, long term	Average	°C	-40 ... 110
Service temperature, short term (max.)	Average	°C	170
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	100
<b>Electrical properties</b>			
Volume resistivity	IEC 60093	Ω * cm	10 <sup>5</sup>
Surface resistivity	IEC 60093	Ω	10 <sup>6</sup>

The following applies to Polyamides: Under the influence of moisture absorption, the mechanical properties change. The material becomes tougher and more resistant to impact, the modulus of elasticity declines. Depending on the environmental atmosphere, the temperature and the period of moisture absorption, only the surface layer is affected by alterations of property to a certain depth. On thick-walled parts, the center area remains unaffected