

## TECAMID 6 ID blue - Stock Shapes (rods, plates, tubes)

### Chemical Designation

PA 6 (Polyamide 6)

### Colour

blue grey opaque

### Density

1.24 g/cm<sup>3</sup>

### Fillers

detectable filler

### Main features

- high toughness
- resistant to many oils, greases and fuels
- electrically insulating
- good wear properties
- good weldable and bondable
- good slide and wear properties
- high strength
- good machinability

### Target Industries

- electronics
- food technology
- mechanical engineering

Data generated directly after machining  
(standard climate Germany).

<b>Mechanical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Tensile strength	50mm/min	80	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Modulus of elasticity (tensile test)	1mm/min	3600	MPa	DIN EN ISO 527-2	(2) For Charpy test: support span 64mm, norm specimen. n.b. = not broken
Tensile strength at yield	50mm/min	80	MPa	DIN EN ISO 527-2	
Elongation at yield (tensile test)	50mm/min	4	%	DIN EN ISO 527-2	
Elongation at break (tensile test)	50mm/min	21	%	DIN EN ISO 527-2	
Impact strength (Charpy)	max. 7.5J	n.b.	kJ/m <sup>2</sup>	DIN EN ISO 179-1eU	(2)
Notched impact strength (Charpy)	max. 7.5J	4	kJ/m <sup>2</sup>	DIN EN ISO 179-1eA	
Shore hardness	D	81		DIN EN ISO 868	
<b>Thermal properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Glass transition temperature		45	°C	DIN EN ISO 11357	(1)
Melting temperature		220	°C	DIN EN ISO 11357	(2)
Service temperature	short term	160	°C		(2)
Service temperature	long term	100	°C		
<b>Electrical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
surface resistivity	Silver electrode, 23°C, 12% r.h.	> 10 <sup>13</sup>	Ω	-	(1)
<b>Other properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Water absorption	24h / 96h (23°C)	0.3 / 0.6	%	DIN EN ISO 62	(1)
Resistance to hot water/ bases		(+)		-	(2)
Resistance to weathering		-		-	(3)
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	(4)

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