



## ECONAMID<sup>®</sup> 6ST1

Polyamide 6, improved impact resistance, for injection moulding.

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
<b>PHYSICAL</b>				
Density		ISO 1183	[g/cm <sup>3</sup> ]	1,11
<b>RHEOLOGICAL</b>				
Viscosity number		ISO 307	[ml/g]	135
<b>MECHANICAL</b>				
Tensile modulus	1 mm/min	ISO 527	[MPa]	2700
Tensile strain at break	50 mm/min	ISO 527	[%]	> 50
Tensile stress at yield	50 mm/min	ISO 527	[MPa]	65
Flexural modulus	2 mm/min	ISO 178	[MPa]	2500
Flexural strength	2 mm/min	ISO 178	[MPa]	90
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m <sup>2</sup> ]	NB
Charpy unnotched	-30°C	ISO 179/1eU	[kJ/m <sup>2</sup> ]	NB
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m <sup>2</sup> ]	13
Izod impact unnotched	+23 °C	ISO 180/1A	[kJ/m <sup>2</sup> ]	NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m <sup>2</sup> ]	11
Hardness Rockwell		ISO 2039/2	[ScaleR]	110
<b>THERMAL</b>				
Melting point	DSC	ISO 11357-1	[°C]	222
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	155
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	55
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	185
<b>ELECTRICAL</b>				
Volume resistivity		IEC 93	[Ω·cm]	10 <sup>15</sup>
Surface resistivity		IEC 93	[Ω]	10 <sup>13</sup>
<b>BURNING BEHAVIOUR</b>				
Flammability	0,8 mm	UL 94	[Class]	HB
Burning rate (FMVSS)		FMVSS 302	[mm/min]	< 100

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for black products

### PROCESSING CONDITIONS:

Drying temperature/time	: 75-85°C / 2-4h
Recommended melt temperature	: 240-260 °C
Recommended mould temperature	: 60-90 °C