

ECONAMID® 6ST1

Polyamide 6, improved impact resistance, for injection moulding.

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TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PHYSICAL				
Density		ISO 1183	[g/cm ³]	1,11
RHEOLOGICAL				
Viscosity number		ISO 307	[ml/g]	135
MECHANICAL				
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 ²]	NB
Charpy unnotched	-30°C	ISO 179/1eU	[kJ/m ²]	NB
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m ²]	13
Izod impact unnotched	+23 °C	ISO 180/1A	[kJ/m ²]	NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m ²]	11
Hardness Rockwell		ISO 2039/2	[ScaleR]	110
THERMAL				
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
ELECTRICAL				
Volume resistivity		IEC 93	[Ω·cm]	10 ¹⁵
Surface resistivity		IEC 93	[Ω]	10 ¹³
BURNING BEHAVIOUR				
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

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

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