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ECONAMID® FL 6 500

(ECONAMID 6ST)

Polyamide 6, impact modified, for injection moulding.

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PRODUCT IDENTIFICATION				
ISO 1043 abbreviation		ISO 1043		PA6-I
PHYSICAL				
Density		ISO 1183	[g/cm ³]	1,12
RHEOLOGICAL				
Viscosity number	96% H2SO4	ISO 307	[ml/g]	135
MECHANICAL				
Tensile modulus	1 mm/min	ISO 527	[MPa]	2900
Tensile strain at break	50 mm/min	ISO 527	[%]	40
Tensile stress at yield	50 mm/min	ISO 527	[MPa]	70
Flexural strength	2 mm/min	ISO 178	[MPa]	95
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]	9
Izod impact unnotched	+23 °C	ISO 180/1U	[kJ/m ²]	NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m ²]	8
Hardness Rockwell		ISO 2039/2	[ScaleR]	115
THERMAL				
Melting point	DSC	ISO 11357-1	[°C]	221
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	160
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	55
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	190
ELECTRICAL				
Volume resistivity		IEC 60093	[Ω·cm]	10 ¹⁵
Surface resistivity		IEC 60093	[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 (with dew point of dried air < -30 °C)
 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. ECONAMID grades are not recommended for injection moulding hot runner systems with a diameter below 1mm

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