

UBESTA 3024LU

Technical Product Information

UBESTA 3024LU is an unmodified medium viscosity Polyamide 12 for injection moulding and extrusion application. This material has following features:

- Superior mechanical properties
- Excellent heat resistance
- Low moisture absorption, good dimensional stability

Basic Properties ⁽¹⁾		Method	Unit	Value
Polymer		-	-	PA12
Colour		-	-	Black
Density		ISO 1183-3	g/cm ³	1,02
Melting Point		ISO 11357	°C	178
MFI @ 235 °C, 2,16 Kg		ISO 1133	g/10 min	8
Shore Hardness	D scale	ISO 868	-	77
Rockwell Hardness	R scale	ISO 2039-2	-	105

Mechanical Properties ⁽²⁾		Method	Unit	Value
Tensile stress at yield		ISO 527-1,2	MPa	47
Tensile strain at yield			%	5
Tensile strain at break			%	> 150
Flexural strength		ISO 178	MPa	60
Flexural modulus			MPa	1600
Charpy impact strength (notched) ⁽³⁾	23 °C	ISO 179/1eA	kJ/m ²	6 C
	-40 °C		kJ/m ²	6 C

Thermal Properties ⁽²⁾		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	115
	1,80 MPa		°C	47
Coefficient of linear expansion		ISO 11359-2	x 10 ⁻⁴ /K	1,3

Others ⁽⁴⁾		Method	Unit	Value
Molding shrinkage	MD	UBE Method	%	0,9
	TD		%	1,2

Note: All tests carried dry as mould

(1) Measured on pellets

(2) Measured on injection-moulded specimens, based on ISO type

(3) P=partial break, C=complete break

(4) Sample dimension is 30×100×3mm

Processing conditions

Extruder							Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4	Adaptor	
Temperature (°C)	40 - 120	190 - 210	210 - 230	220 - 240	220 - 240	220 - 240	220 - 240

Drying conditions

UBESTA is supplied dry (moisture content < 0,1%) and packed in high barrier films. However, as polyamide is a hygroscopic material, the user should take a special care of the possible moisture absorption once the bag or liner box has been opened. In case of moisture absorption, the material should be dried with dehumidified air at 80°C for more than 4 hours.

Storage

Well-sealed packages could be stored in cool and dry conditions over long periods of time. Protect the packages from heat and direct sunlight to prevent possible damages.

Health & environmental data

Please refer to the corresponding **UBESTA** grade Safety Data Sheet (SDS).

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