

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

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

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

Others <sup>(4)</sup>		Method	Unit	Value
<b>Molding shrinkage</b>	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) C=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	
<b>Temperature (°C)</b>	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.

