

## UBESTA 3020U

### Technical Product Information

UBESTA 3020U is a heat stabilized polyamide 12 suitable for a wide range of injection moulding applications. This material has following features:

- Low moisture absorption, excellent dimensional stability
- Excellent moldability
- High heat resistance

Basic Properties <sup>(1)</sup>	Method	Unit	Value
<b>Polymer</b>	-	-	PA12
<b>Colour</b>	-	-	Natural
<b>Density</b>	ISO 1183-3	g/cm <sup>3</sup>	1,02
<b>Melting Point</b>	ISO 11357	°C	175 - 181
<b>MFI @ 235 °C, 2,16 Kg</b>	ISO 1133	g/10 min	20

Mechanical Properties <sup>(2)</sup>	Method	Unit	Value	
<b>Tensile stress at yield</b>	ISO 527-1,2	MPa	45	
<b>Tensile strain at break</b>		%	>50	
<b>Tensile modulus</b>		MPa	1500	
<b>Flexural strength</b>	ISO 178	MPa	59	
<b>Flexural modulus</b>		MPa	1500	
<b>Charpy impact strength (notched) <sup>(3)</sup></b>	ISO 179/1eA	23 °C	kJ/m <sup>2</sup>	4 C
		-40 °C	kJ/m <sup>2</sup>	4 C

Thermal Properties <sup>(2)</sup>	Method	Unit	Value	
<b>Temp. of deflection under load</b>	ISO 75-2	0,45 MPa	°C	92
		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>	UBE Method	MD	%	0,9
		TD	%	1,1

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

	Cylinder					Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4	
<b>Temperature (°C)</b>	40 - 120	190-210	210 – 230	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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