

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

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

Thermal Properties ⁽²⁾	Method	Unit	Value	
Temp. of deflection under load	ISO 75-2	0,45 MPa	°C	92
		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	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 30x100x3mm



Processing conditions

	Cylinder					Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4	
Temperature (°C)	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.

