

UBE NYLON 1024IU1

Technical Product Information

UBE NYLON 1024IU1 is an impact modified and heat stabilized high viscosity Polyamide 6, suitable for tube extrusion and blow moulding extrusion processes. This material has following features:

- Excellent chemical resistance and barrier against solvents
- High impact strength, especially at low temperature
- Excellent processability

Basic Properties ⁽¹⁾		Method	Unit	Value
Polymer		-	-	PA6
Colour		-	-	Natural
Density		ISO 1183-3	g/cm ³	1,08
Melting Point		ISO 11357	°C	220
MFI @ 235°C, 2,16 Kg		ISO 1133	g/10 min	2
Shore Hardness	D scale	ISO 868	-	69
Rockwell Hardness	R scale	ISO 2039-2	-	112

Mechanical Properties ⁽²⁾		Method	Unit	Value
Tensile stress at yield		ISO 527-1,2	MPa	65
Tensile strain at yield			%	4
Tensile strain at break			%	20
Flexural strength		ISO 178	MPa	80
Flexural modulus			MPa	2300
Charpy impact strength (notched) ⁽³⁾	23 °C	ISO 179/1eA	kJ/m ²	36 P
	-40 °C		kJ/m ²	19 C

Thermal Properties ⁽²⁾		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	144
	1,80 MPa		°C	53
Coefficient of linear expansion		ISO 11359-2	x 10 ⁻⁴ /K	1,0

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

Processing conditions

	Cylinder					Adaptor	Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4		
Temperature (°C)	40 - 120	210 - 230	220 - 240	240 - 260	240 - 260	240 - 260	240 - 260

Drying conditions

UBE NYLON 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 **UBE NYLON** grade Safety Data Sheet (SDS).

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