

## UBE NYLON 1024JI

### Technical Product Information

UBE NYLON 1024JI is a plasticized and impact modified, high viscosity Polyamide 6. It is most suitable for multilayer tubes in applications such as multilayer fuel or air brake lines. This material has following features:

- High impact strength
- Excellent processability

Basic Properties <sup>(1)</sup>		Method	Unit	Value
<b>Polymer</b>		-	-	PA6
<b>Colour</b>		-	-	Natural
<b>Density</b>		ISO 1183-3	g/cm <sup>3</sup>	1,11
<b>Melting Point</b>		ISO 11357	°C	214
<b>MFI @ 235°C, 2,16 Kg</b>		ISO 1133	g/10 min	7
<b>Shore Hardness</b>	D scale	ISO 868	-	64
<b>Rockwell Hardness</b>	R scale	ISO 2039-2	-	68

Mechanical Properties <sup>(2)</sup>		Method	Unit	Value
<b>Tensile stress at yield</b>		ISO 527-1,2	MPa	35
<b>Tensile strain at yield</b>			%	30
<b>Tensile strain at break</b>			%	> 150
<b>Flexural strength</b>		ISO 178	MPa	22
<b>Flexural modulus</b>			MPa	550
<b>Charpy impact strength (notched) <sup>(3)</sup></b>	23 °C	ISO 179/1eA	kJ/m <sup>2</sup>	105 P
	-40 °C		kJ/m <sup>2</sup>	8 C

Thermal Properties <sup>(2)</sup>		Method	Unit	Value
<b>Temp. of deflection under load</b>	0,45 MPa	ISO 75-2	°C	100
	1,80 MPa		°C	44
<b>Coefficient of linear expansion</b>		ISO 11359-2	x 10 <sup>-4</sup> /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	230 - 250	230 - 250	230 - 250	230 - 250

## 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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