UBE NYLON 1013B

Technical Product Information

UBE NYLON 1013B is a low viscosity, unmodified Polyamide 6 for general application. This material has following features:

- Excellent mechanical properties
- Good processability

Basic Properties [1]	Method	Unit	Value
Polymer	-	-	PA6
Colour	-	-	Natural
Density	ISO 1183-3	g/cm^3	1,14
Melting Point	ISO 11357	°C	215 - 225
Relative Viscosity (96% H$_2$SO$_4$)	JIS K6810	-	2,45

Mechanical Properties [2]		Method	Unit	Value
Tensile stress at yield			MPa	80
Tensile strain at break		ISO 527-1,2	%	30
Tensile modulus			MPa	2900
Flexural strength		ISO 178	MPa	110
Flexural modulus			MPa	2700
Charpy impact strength (notched) [3]	23°C	ISO 179/1eA	kJ/m^2	6 C

Thermal Properties [2]		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	155
	1,80 MPa		°C	60
Coefficient of linear expansion		ISO 11359-2	x 10^{-4}/K	0,8

Others [4]		Method	Unit	Value
Molding shrinkage	MD	UBE Method	%	1,4
	TD		%	1,5

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**	
Temperature (°C)	40 - 120	210-230	230 - 250	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.