UBE NYLON 1015GNKF

Technical Product Information

UBE NYLON 1015GNKF is a 30% glass fiber reinforced and thermal resistance Polyamide 6 suitable for under-hood or structural applications. This material has following features:

- Good thermal resistance
- High flowability
- Good processability

Basic Properties (1)	Method	Unit	Value
Polymer	-	-	PA6
Colour	-	-	Black
Density	ISO 1183-3	g/cm³	1,36
Melting Point	ISO 11357	°C	215 - 225

Mechanical Properties (2)		Method	Unit	Value
Tensile strength		ISO 527-1,2	MPa	185
Tensile strain at break			%	3,3
Tensile modulus			MPa	9900
Flexural strength		ISO 178	MPa	280
Flexural modulus			MPa	8900
Charpy impact strength (notched) (3)	23°C	ISO 179/1eA	kJ/m²	12 C

Thermal Properties (2)		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	220
	1,80 MPa		°C	205
Coefficient of linear expansion		ISO 11359-2	x 10⁻⁴/K	0,2

Others (2)		Method	Unit	Value
Molding shrinkage	MD	ISO 294-4	%	0,2
	TD		%	0,7

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					Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4	
Temperature (°C)	40 - 120	240 - 260	250 - 270	275 - 295	275 - 295	275 - 295

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.