

UBE NYLON 1015GC9

Technical Product Information

UBE NYLON 1015GC9 is a 45% glass fiber reinforced Polyamide 6 suitable for metal replacement. 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	1,50
Melting Point	ISO 11357	°C	215 - 225

Mechanical Properties ⁽²⁾	Method	Unit	Value	
Tensile strength	ISO 527-1,2	MPa	225	
Tensile strain at break		%	3,3	
Tensile modulus		MPa	14200	
Flexural strength	ISO 178	MPa	350	
Flexural modulus		MPa	13400	
Charpy impact strength (notched) ⁽³⁾	23°C	ISO 179/1eA	kJ/m ²	20 C

Thermal Properties ⁽²⁾	Method	Unit	Value	
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	220
	1,80 MPa		°C	210
Coefficient of linear expansion	ISO 11359-2	x 10 ⁻⁴ /K	0,2	

Others ⁽⁴⁾	Method	Unit	Value	
Molding shrinkage	MD	UBE Method	%	0,1
	TD		%	0,5

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	240 - 260	255 - 275	270 - 290	270 - 290	270 - 290

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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