

UBESTA 3020GX6

Technical Product Information

UBESTA 3020GX6 is a 13% glass fiber reinforced and conductive Polyamide 12 for injection moulding application. The typical application is quick connectors in fuel line systems. This material has following features:

- Excellent mechanical properties
- Excellent moldability
- Superior conductivity

Basic Properties ⁽¹⁾	Method	Unit	Value
Polymer	-	-	PA12
Colour	-	-	Black
Density	ISO 1183-3	g/cm ³	1,16
Melting Point	ISO 11357	°C	175 – 181

Mechanical Properties ⁽²⁾	Method	Unit	Value	
Tensile strength	ISO 527-1,2	MPa	130	
Tensile strain at break		%	6	
Tensile modulus		MPa	9600	
Flexural strength	ISO 178	MPa	195	
Flexural modulus		MPa	8100	
Charpy impact strength (notched) ⁽³⁾	ISO 179/1eA	23 °C	kJ/m ²	21 C
		-40 °C	kJ/m ²	12 C

Thermal Properties ⁽²⁾	Method	Unit	Value	
Temp. of deflection under load	ISO 75-2	0,45 MPa	°C	177
		1,80 MPa	°C	165
Coefficient of linear expansion	ISO 11359-2	x 10 ⁻⁴ /K	0,2	

Electrical Properties ⁽²⁾	Method	Unit	Value
Volume Resistivity	IEC 60093	Ω cm	1 · 10 ⁶

Others ⁽⁴⁾	Method	Unit	Value	
Molding shrinkage	UBE Method	MD	%	0,1
		TD	%	0,6

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

Temperature (°C)	Cylinder					Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4	
	40 - 120	210-230	230 - 250	240 - 260	240 - 260	240 - 260

Drying conditions

UBESTA 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 **UBESTA** grade Safety Data Sheet (SDS).

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