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

Thermal Properties [2]		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°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	MD	UBE Method	%	0,1
	TD		%	0,6

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

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.