

UBE NYLON 1013ASX24

Technical Product Information

UBE NYLON 1013ASX24 is a low viscosity, unfilled Polyamide 6 with maleic anhydride modified polyethylene (mPE) for fuel module application. This material has following features:

- High injection welding strength
- Low fuel permeability
- High calcium chloride resistance

Basic Properties ⁽¹⁾	Method	Unit	Value
Polymer	-	-	PA6
Colour	-	-	Black
Density	ISO 1183-3	g/cm ³	1,14
Melting Point	ISO 11357	°C	215-225
MFR @ 235°C, 2,16 Kg	ISO 1133	g/10 min	32

Mechanical Properties ⁽²⁾	Method	Unit	Value	
Tensile stress at yield	ISO 527-1,2	MPa	80	
Tensile strain at break		%	4	
Tensile modulus		MPa	3300	
Flexural strength	ISO 178	MPa	110	
Flexural modulus		MPa	2800	
Charpy impact strength (notched) ⁽³⁾	23°C	ISO 179/1eA	kJ/m ²	5 C

Thermal Properties ⁽²⁾	Method	Unit	Value	
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	164
	1,80 MPa		°C	63
Coefficient of linear expansion	ISO 11359-2	x 10 ⁻⁴ /K	0,8	

Others ⁽²⁾	Method	Unit	Value	
Molding shrinkage	MD	ISO 294-4	%	1,0
	TD		%	1,1

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	210-230	270 - 290	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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