

UBE NYLON 1018SE

Technical Product Information

UBE NYLON 1018SE is a flame retardant, impact modified Polyamide 6. It is most suitable for extrusion of corrugated tubing which is used to cover electric wire harness and cable automobile. This material has following features:

- Non-halogen and non-phosphorous flame retardant
- High long-term stability
- Excellent processability

Basic Properties ⁽¹⁾		Method	Unit	Value
Polymer		-	-	PA6
Colour		-	-	Gray
Density		ISO 1183-3	g/cm ³	1,14
Melting Point		ISO 11357	°C	220
MFI @ 235°C, 2.16 Kg		ISO 1133	g/10min	9
Shore Hardness	D scale	ISO 868	-	71
Rockwell Hardness	R scale	ISO 2039-2	-	121

Mechanical Properties ⁽²⁾		Method	Unit	Value
Tensile stress at break		ISO 527-1,2	MPa	86
Tensile strain at break			%	14
Flexural strength		ISO 178	MPa	112
Flexural modulus			MPa	2900
Charpy impact strength (notched) ⁽³⁾	23 °C	ISO 179/1eA	kJ/m ²	5 C
	-40 °C		kJ/m ²	5 C

Thermal Properties ⁽²⁾		Method	Unit	Value
Temp. of deflection under load	0,45 MPa	ISO 75-2	°C	182
	1,80 MPa		°C	60
Coefficient of linear expansion		ISO 11359-2	x 10 ⁻⁴ /K	1,5

Flammability Properties ⁽²⁾		Method	Unit	Value
Oxygen Index		ISO 4589	%	28
Flammability		IEC 60695	-	V2

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					Adaptor	Die
	Hopper	Zone 1	Zone 2	Zone 3	Zone 4		
Temperature (°C)	40 - 120	220 - 240	240 - 260	240 - 260	240 - 260	240 - 260	240 - 260

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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