

Product Texts

PA6 flame retardant extrusion grade. Halogen and phosphorus free. Deep black colour.

Suitable for parts where fire retardancy is required. Typical applications include cable conduits and cable jacketings for transportation sector. Rated V-0 at 0.4 mm according to UL-94.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.0 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3500 / -	MPa	ISO 527
^[C] Yield stress	75 / -	MPa	ISO 527
^[C] Yield strain	3 / -	%	ISO 527
^[C] Nominal strain at break	14 / -	%	ISO 527
^[C] Charpy notched impact strength, +23°C	5 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	75 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	160 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	195 / *	°C	ISO 306
^[C] Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	35 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E10	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	8 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2 / *	%	Sim. to ISO 62
^[C] Density	1160 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.1	%	-
Melt temperature	240 - 280	°C	-
Mold temperature	70 - 80	°C	-

Characteristics

Processing

Injection Molding, Profile Extrusion, Wire/Cable Extrusion, Other Extrusion

Special Characteristics

Flame retardant, Halogen-free, Phosphorus-free, Heat stabilized or stable to heat

Delivery form

Granules, Black

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Additives

Release agent

Other text information**Injection molding**

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature	Mold Temperature	Injection Speed
240 - 280°C	70 - 80°C	medium
Extrusion Temperature		
240 - 260°C		