

Product Texts

PA66 flame retardant injection moulding grade with enhanced mechanical properties retention after thermal aging. Halogen and phosphorus free. Black colour.

Suitable for parts where fire retardancy is required. Rated V-0 at 0.25 mm according to UL-94.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3600 / -	MPa	ISO 527
^[C] Charpy impact strength, +23°C	40 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	4.5 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	70 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	200 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	220 / *	°C	ISO 306
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.2 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Oxygen index	32 / *	%	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] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	7.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	1.7 / *	%	Sim. to ISO 62
^[C] Density	1190 / -	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	270 - 290	°C	-
Mold temperature	60 - 80	°C	-

Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Granules, Black

Additives

Release agent

Special Characteristics

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

Regional Availability

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

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

270 - 290°C

Mold Temperature

60 - 80°C

Injection Speed

medium

Extrusion Temperature

270 - 290°C