

**Product Texts**

PA66 flame retardant injection moulding grade. Halogen and phosphorus free. High flowability. Natural colour.

Suitable for parts where fire retardancy is required, particularly for thin-walled items or with long flow paths. Rated V-0 at 0.4 mm according to UL-94.

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

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3700 / -	MPa	ISO 527
<sup>[C]</sup> Yield stress	90 / -	MPa	ISO 527
<sup>[C]</sup> Yield strain	4 / -	%	ISO 527
<sup>[C]</sup> Nominal strain at break	6 / -	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	3.5 / -	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	80 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	200 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	220 / *	°C	ISO 306
<sup>[C]</sup> Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E10	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	31 / 26	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	7.7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.8 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1180 / -	kg/m <sup>3</sup>	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, Natural Color

**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°CMold Temperature  
60 - 80°CInjection Speed  
mediumExtrusion Temperature  
270 - 290°C