

Product Texts

PA612 semi-rigid, high viscosity extrusion grade. Toughened. Improved resistance to uric acid solutions. Black colour.

Suitable for extrusion of profiles, tubes and pipes. Material especially developed for automotive under the hood applications, employed in selective catalytic reductions (SCR) systems.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	920 / -	MPa	ISO 527
^[C] Yield stress	30 / -	MPa	ISO 527
^[C] Yield strain	25 / -	%	ISO 527
^[C] Charpy notched impact strength, +23°C	85 / -	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	68 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	212 / *	°C	ISO 11357-1/-3

[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	2 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.8 / *	%	Sim. to ISO 62
^[C] Density	1010 / -	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	≤275	°C	-

Characteristics**Processing**

Injection Molding, Pipe/Tube Extrusion, Profile Extrusion

Chemical Resistance

Acid Resistance

Delivery form

Granules, Black

Applications

Automotive

Special Characteristics

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	Mold Temperature	Injection Speed
230 - 260°C	70 - 80°C	medium

Extrusion Processing Parameters:

<i>Rear</i>	<i>Center Rear</i>	<i>Center Front</i>	<i>Front</i>	<i>Head and Die</i>	<i>Melt Temp</i>
220°C	250°C	260°C	270°C	275 - 280°C	275°C
428°F	482°F	500°F	518°F	527 - 536°F	527°F