

Product Texts

Pebax® 5533 SN 70 BLACK resin is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SN 70 grade is made conductive thanks to carbon black.

Main applications:

- Conductive injected parts
- Hose for fuel transportation

Packaging:

This grade is delivered dried in sealed packaging (20 kg bags) ready to be processed.

Shelf Life:

Two years from the delivery. For any use above this limit, please refer to our technical services.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	5 / *	cm ³ /10min	ISO 1133
Temperature	250 / *	°C	-
Load	5 / *	kg	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	305 / 298	MPa	ISO 527
^[C] Yield stress	18 / 17	MPa	ISO 527
^[C] Yield strain	31 / 36	%	ISO 527
^[C] Nominal strain at break	>50 / >50	%	ISO 527
^[C] Charpy notched impact strength, -30°C	- / 18	kJ/m ²	ISO 179/1eA
^[C] Shore D hardness	60 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	159 / *	°C	ISO 11357-1/-3
^[C] Coeff. of linear therm. expansion, parallel	220 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.2 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	110000 / -	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 5500	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.2 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.5 / *	%	Sim. to ISO 62
^[C] Density	1090 / 1090	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65 - 75	°C	-
Pre-drying - Time	4 - 6	h	-

Melt temperature	200 - 270	°C	-
Mold temperature	25 - 60	°C	-

Characteristics**Processing**

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

Delivery form

Pellets, Black

Special Characteristics

Increased electrical conductivity, Anti-static, Platable, Light stabilized or stable to light, U.V. stabilized or stable to weather, 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****Processing conditions:**

- Typical melt temperature (Min / Recommended / Max) : 200°C / 240°C / 270°C.
- Typical mold temperature : 25 – 60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 65-75°C.

Other extrusion**Processing conditions:**

- Typical melt temperature (Min / Recommended / Max) : 210°C / 220°C / 230°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 65-75°C.