

PEBAX®

5533 SN 70 BLACK

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.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	5 / *	cm ³ /10min	ISO 1133
Temperature	250 / *	°C	-
	482 / *	°F	-
Load	5 / *	kg	-
	11 / *	lb	-
MECHANICAL PROPERTIES			
Tensile Modulus	305 / 298	MPa	ISO 527-1/-2
	44200 / 43200	psi	
Yield stress	18 / 17	MPa	ISO 527-1/-2
	2610 / 2470	psi	
Yield strain	31 / 36	%	ISO 527-1/-2
Nominal Strain at Break	>50 / >50	%	ISO 527-1/-2
Shore D Hardness	60 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 18	kJ/m ²	ISO 179/1eA
	- / 8.56	ftlb/in ²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	159 / *	°C	ISO 11357-1/-3
Coeff. of Linear Thermal Expansion, parallel	220 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nominal Thickness	HB / *	class	IEC 60695-11-10
Thickness Tested	1.6 / *	mm	-
	0.0630 / *	in	
Burning Behav. at Thickness h	HB / *	class	IEC 60695-11-10
Thickness Tested	3.2 / *	mm	-
	0.1260 / *	in	
ELECTRICAL PROPERTIES			

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Volume Resistivity	110000 / -	Ohm*m	IEC 60093
Surface Resistivity	* / 5500	Ohm	IEC 60093
OTHER PROPERTIES			
Water Absorption	1.2 / *	%	Sim. to ISO 62
Humidity Absorption	0.5 / *	%	Sim. to ISO 62
Density	1090 / 1090	kg/m ³	ISO 1183
	1.09 / 1.09	g/cm ³	

MAIN APPLICATIONS: • Conductive injected parts • Hose for fuel transportation

PACKAGING:

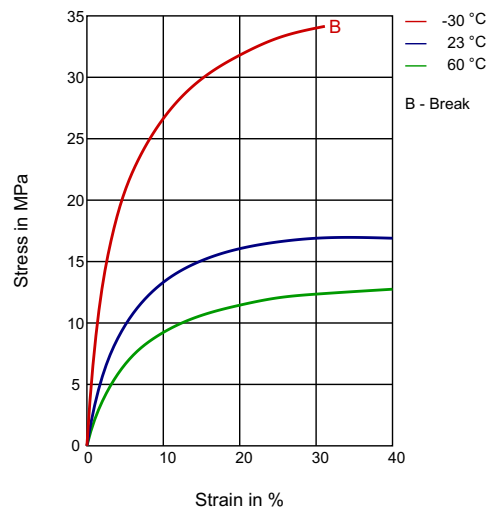
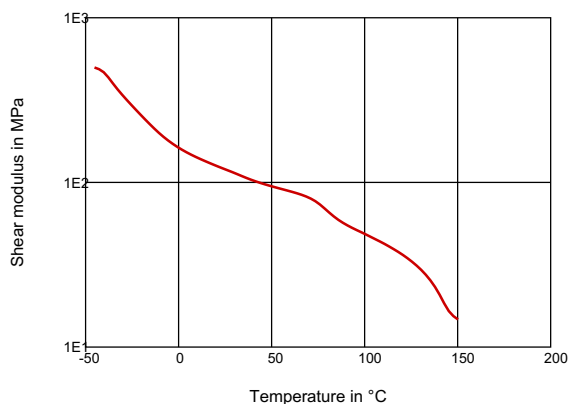
This grade is delivered dried in sealed packaging (20 kg bags) ready to be processed.

SHELF LIFE:

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

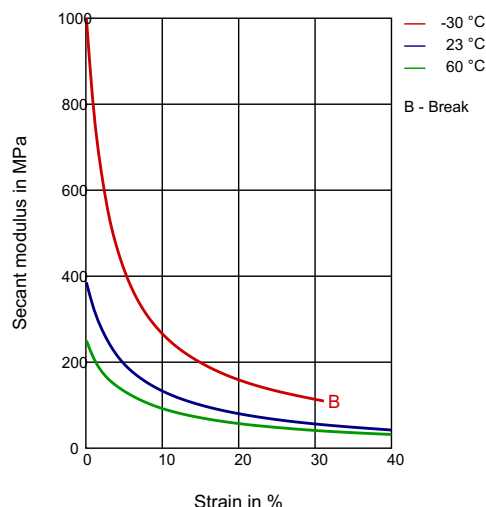
DIAGRAMS

DYNAMIC SHEAR MODULUS-TEMPERATURE STRESS-STRAIN



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SECANT MODULUS-STRAIN



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.

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.

PROCESSING

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

DELIVERY FORM

Pellets

SPECIAL CHARACTERISTICS

Conductive, Heat Stabilized, Light Stabilized

REGIONAL AVAILABILITY

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