

PEBAX®

7233 SP 01

Polyether block amide **Pebax® 7233 SP 01 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SP grade has been developed to be heat and UV resistant.

This UL grade has been developed to be heat and UV resistant.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Molding Shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.3 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 510	MPa	ISO 527-1/-2
	- / 74000	psi	
Yield Stress	- / 26	MPa	ISO 527-1/-2
	- / 3770	psi	
Yield Strain	- / 18	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Stress at 10% Elongation	29 / *	MPa	ISO 527-1/-2
	4210 / *	psi	
Stress at 100% Elongation	25 / *	MPa	ISO 527-1/-2
	3630 / *	psi	
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Stress at Break TPE	56 / *	MPa	ISO 527-1/-2
	8120 / *	psi	
Tear Strength	166 / *	kN/m	ISO 34-1
Shore D Hardness, after 15 s	61 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 15	kJ/m²	ISO 179/1eA
	- / 7.14	ftlb/in²	
Charpy Notched Impact Strength, -30°C	- / 10	kJ/m²	ISO 179/1eA
	- / 4.76	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	174 / *	°C	ISO 11357-1/-3
Vicat Softening Temperature, 50°C/h 50N	106 / *	°C	ISO 306
	223 / *	°F	
Coeff. of Linear Thermal Expansion, parallel	120 / *	E-6/K	ISO 11359-1/-2
ELECTRICAL PROPERTIES			
Relative Permittivity, 100Hz	7 / -	-	IEC 60250

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Source: automatically generated TDS from Material Database on 20-02-2024

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Relative Permittivity, 1MHz	4 / -	-	IEC 60250
Dissipation Factor, 100Hz	1630 / -	E-4	IEC 60250
Dissipation Factor, 1MHz	586 / -	E-4	IEC 60250
Volume Resistivity	8E11 / -	Ohm* m	IEC 62631-3-1
Surface Resistivity	* / 1.84E14	Ohm	IEC 62631-3-2
Dielectric (Electric) Strength	44.5 / -	kV/mm	IEC 60243-1
	1130 / -	kV/in	
Comparative Tracking Index	* / 600	-	IEC 60112
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	0.9 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.7 / *	%	ISO 62
Density	1010 / 1010	kg/m³	ISO 1183
	1.01 / 1.01	g/cm³	

MAIN APPLICATIONS:

- Athletic foot wear components
- Hook and loop fasteners
- Ski shoes
- Zip fasteners

PACKAGING:

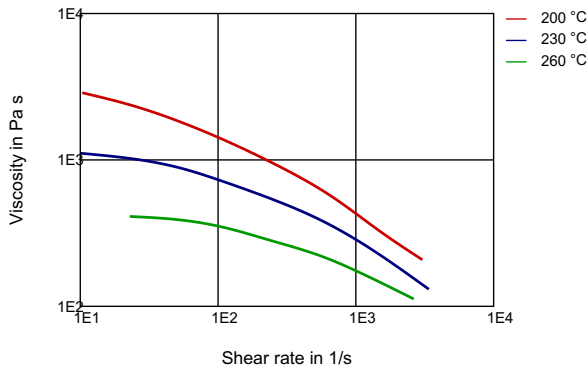
This grade is delivered dried in sealed packaging (20 or 25 kg bags) ready to be processed.

SHELF LIFE:

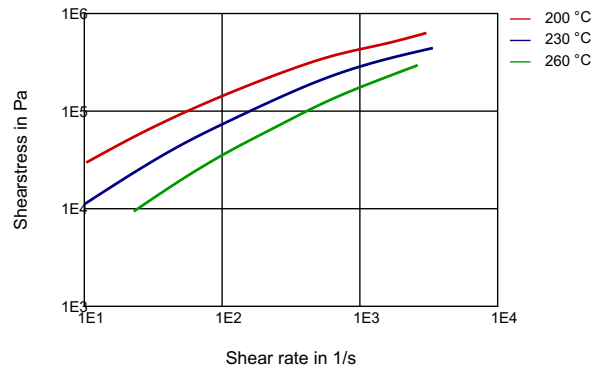
Two years from the delivery. For any use above this limit, please refer to our technical services.

DIAGRAMS

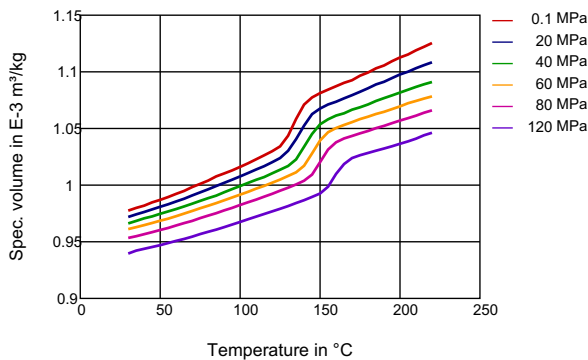
VISCOSITY-SHEAR RATE



SHEARSTRESS-SHEAR RATE



SPECIFIC VOLUME-TEMPERATURE (PVT)



Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 230°C / 260°C / 290°C.
- Typical mold temperature : 25 – 60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 5-7 hours at 70-80°C.

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 220°C / 235°C / 250°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 5-7 hours at 70-80°C.

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PROCESSING Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
DELIVERY FORM Pellets	
SPECIAL CHARACTERISTICS Heat Stabilized, Light Stabilized	
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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