

# PEBAX® 4533 SP 01

Polyether block amide Pebax® 4533 SP 01 is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SP grade has been developed to be heat and UV resistant.

## MAIN CHARACTERISTICS

Property	Typical Value	Unit	Test Method
Density	1.01	g/cm <sup>3</sup>	ISO 1183
Water Absorption at Equilibrium At 20°C and 50 % R.H.	0.4	%	ISO 62
Water Absorption At 23°C and 24 h in water	1.2	%	
Melting Point	147	°C	ISO 11357
Vicat Point Under 1 daN	111	°C	ISO 306
Shrinkage (after 24 h, 4 mm, mold at 40°C) // ⊥	0.4 1.1	% %	Internal method
Hardness (*) Instantaneous After 15 s	92 / 46 90 / 41	Shore A / Shore D Shore A / Shore D	
Tensile Test (*) Stress at Break Strain at Break	42 >550	MPa %	ISO 527
Flexural Modulus (*)	86	MPa	ISO 178
Charpy Impact (*) Unnotched 23°C Unnotched -30°C V-notched 23°C V-notched -30°C	No break No break No break No break	kJ/m <sup>2</sup> kJ/m <sup>2</sup> kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 179

(\*) Samples conditioned 15 days at 23°C - 50 % R.H.

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## MAIN APPLICATIONS

- Flexible injected parts.
- Ski shoes.
- Silent gears.
- TPU processing aid.

## PROCESSING CONDITIONS

Conditions	Typical values
<b>Extrusion</b> Melt Temperature (Min / Recommended / Max)	210°C / 220°C / 230°C
<b>Injection</b> Melt Temperature (Min / Recommended / Max)	200°C / 240°C / 270°C
<b>Mold</b> Temperature	10 – 30°C

<b>Drying (only necessary for bags opened for more than two hours)</b> Time Temperature	4 - 6 hours 60 - 70°C
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## PACKAGING

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

## SHELF LIFE

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

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See Safety Data Sheet for Health & Safety Considerations.