

PEBAX® 4533 SA 01 MED

Polyether block amide Pebax® 4533 SA 01 MED is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This grade offers the highest quality and it is specially designed to meet the stringent requirements of the medical applications such as minimally invasive devices. Upon request, letters regarding USP Class VI compliance can be provided.

MAIN CHARACTERISTICS

Property	Typical Value	Unit	Test Method
Density	1.01	g/cm ³	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 ² kJ/m ² kJ/m ² kJ/m ²	ISO 179

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

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MAIN APPLICATIONS

- Arterial catheters.
- Flexible injected parts.

PROCESSING CONDITIONS

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

Drying (only necessary for bags opened for more than two hours) Time Temperature	4 - 8 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.