

# PEBAX® 4533 SA 01 MED

Polyether block amide Pebax® 4533 SA 01 MED resin 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 applications:

- Arterial catheters.
- Flexible injected parts.

#### Packaging:

This grade is delivered dried in sealed packaging (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.

## MAIN CHARACTERISTICS

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
Tensile Modulus	12800 / 11700	psi	ISO 527-1/-2
Stress at 50% strain	1310 / 1310	psi	ISO 527-1/-2
Strain at break	> 50 / > 50	%	ISO 527-1/-2
Charpy impact strength, +23°C	- / N	ftlb/in <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	- / N	ftlb/in <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	- / N	ftlb/in <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	- / N	ftlb/in <sup>2</sup>	ISO 179/1eA
Melting temperature, 10°C/min	297 / *	°F	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	232 / *	°F	ISO 306
Water absorption	1.2 / *	%	Sim. to ISO 62
Humidity absorption	0.4 / *	%	Sim. to ISO 62
Density	1.01 / 1.01	g/cm <sup>3</sup>	ISO 1183
Injection Molding, melt temperature	464	°F	ISO 294
Injection Molding, mold temperature	86	°F	ISO 10724
Shore A hardness, 3s	92 / *	-	ISO 7619-1
Shore D hardness, 15s	41 / *	-	ISO 7619-1

#### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 200°C / 240°C / 270°C.
- Typical mold temperature : 10 – 30°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 60-70°C.

#### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 210°C / 220°C / 230°C.

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- **Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 60-70°C.**

## Processing

Injection Molding, Other Extrusion

## Delivery form

Pellets

## Special Characteristics

Light stabilized or stable to light, Heat stabilized or stable to heat

## Regional Availability

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

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