

# 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.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>RHEOLOGICAL PROPERTIES</b>			
Molding Shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
<b>MECHANICAL PROPERTIES</b>			
Tensile Modulus	88 / 81	MPa	ISO 527-1/-2
	12800 / 11700	psi	
Stress at 50% Strain	9 / 9	MPa	ISO 527-1/-2
	1310 / 1310	psi	
Strain at Break	>50 / >50	%	ISO 527-1/-2
Shore A Hardness, after 15 s	90 / *	-	ISO 868
Shore D Hardness, after 15 s	41 / *	-	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	- / No Break	kJ/m²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / No Break	kJ/m²	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
Melting Temperature, 10°C/min	147 / *	°C	ISO 11357-1/-3
<b>OTHER PROPERTIES</b>			
Water Absorption, 23°C, immersion, equilibrium	1.2 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.4 / *	%	ISO 62
Density	1010 / 1010	kg/m³	ISO 1183
	1.01 / 1.01	g/cm³	

**MAIN APPLICATIONS:** • 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.

### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 200°C / 240°C / 270°C.

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Source: automatically generated TDS from Material Database on 12-08-2024

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

<b>PROCESSING</b> Injection Molding, Other Extrusion	<b>Headquarters:</b> 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
<b>DELIVERY FORM</b> Pellets	
<b>SPECIAL CHARACTERISTICS</b> Heat Stabilized	
<b>REGIONAL AVAILABILITY</b> North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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