

# PEBAX®

## 5533 SA 01 MED

Polyether block amide **Pebax® 5533 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.

**Pebax® 5533 SA 01 MED resin** also offers an excellent combination of properties such as: kink resistance, low friction coefficient and superior dynamic response.

Upon request, letters regarding USP Class VI compliance can be provided.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>RHEOLOGICAL PROPERTIES</b>			
Molding Shrinkage, parallel	0.8 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
<b>MECHANICAL PROPERTIES</b>			
Tensile Modulus	170 / 161	MPa	ISO 527-1/-2
	24700 / 23400	psi	
Yield Stress	12 / 12	MPa	ISO 527-1/-2
	1740 / 1740	psi	
Yield Strain	25 / 25	%	ISO 527-1/-2
Nominal Strain at Break	>50 / >50	%	ISO 527-1/-2
Shore D Hardness, after 15 s	50 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
Melting Temperature, 10°C/min	159 / *	°C	ISO 11357-1/-3
Vicat Softening Temperature, 50°C/h 50N	66 / *	°C	ISO 306
	151 / *	°F	
<b>OTHER PROPERTIES</b>			
Water Absorption, 23°C, immersion, equilibrium	1.2 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.6 / *	%	ISO 62
Density	1010 / 1010	kg/m <sup>3</sup>	ISO 1183
	1.01 / 1.01	g/cm <sup>3</sup>	

**MAIN APPLICATIONS:** • Tubings like angiography and angioplasty catheters • Flexible injected parts

### PACKAGING:

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

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### 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.
- Typical mold temperature : 25 – 60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 65-75°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 65-75°C.

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

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