

Pebax® 5533 SA 01 MED

TPA

ARKEMA

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.

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.

Shelf Life:

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

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	170 / 161	MPa	ISO 527
Yield stress	12 / 12	MPa	ISO 527
Yield strain	25 / 25	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Shore Hardness D (15s)	50 / -	-	ISO 868

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	159 / *	°C	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	66 / *	°C	ISO 306

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	1.2 / *	%	Sim. to ISO 62
Humidity absorption	0.6 / *	%	Sim. to ISO 62
Density	1010 / 1010	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65 - 75	°C	-
Pre-drying - Time	4 - 6	h	-
Melt temperature	200 - 270	°C	-
Mold temperature	25 - 60	°C	-

Characteristics

Processing

Injection Molding, Other Extrusion

Special Characteristics

Light stabilized or stable to light, Heat aging stabilized

Delivery form

Pellets

Certifications

Medical, US Pharmacopeia Class VI Approved

Injection Molding

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.

Other Extrusion

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.