

## Pebax® 7033 SA 01 MED

TPA

### Pebax® 7033 SA 01 MED resin

Polyether block amide **Pebax® 7033 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® 7033 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.

<b>Rheological properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Molding shrinkage, parallel	<b>1.2 / *</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>1.5 / *</b>	%	ISO 294-4, 2577
<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Tensile Modulus	<b>414 / 390</b>	MPa	ISO 527-1/-2
Yield stress	<b>23 / 22</b>	MPa	ISO 527-1/-2
Yield strain	<b>22 / 20</b>	%	ISO 527-1/-2
Nominal strain at break	<b>&gt;50 / &gt;50</b>	%	ISO 527-1/-2
Charpy impact strength, +23°C	<b>- / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	<b>- / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>- / 120</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	<b>- / 20</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Melting temperature, 10°C/min	<b>172 / *</b>	°C	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	<b>129 / *</b>	°C	ISO 306
<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Water absorption	<b>1.43 / *</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.76 / *</b>	%	Sim. to ISO 62
Density	<b>1010 / -</b>	kg/m <sup>3</sup>	ISO 1183

<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
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Injection Molding, melt temperature	<b>260</b>	°C	ISO 294
Injection Molding, mold temperature	<b>60</b>	°C	ISO 10724

<b>Mechanical properties (TPE)</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Abrasion resistance	<b>41 / *</b>	mm <sup>3</sup>	ISO 4649
Shore D hardness, 15s	<b>61 / *</b>	-	ISO 7619-1

### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 230°C / 260°C / 290°C
- Typical mold temperature : 25 – 60°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 5-7 hours at 70-80°C

### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 220°C / 235°C / 250°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 5-7 hours at 70-80°C.

### Characteristics

#### 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