

# PEBAX® 7033 SA 01 MED

Polyether block amide Pebax® 7033 SA 01 MED 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 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 CHARACTERISTICS

| Property   | Typical Value   | Unit   | Test Method     |
|--|---|--|-----------------|
| <b>Density</b>   | <b>1.01</b>   | g/cm <sup>3</sup>  | ISO 1183        |
| <b>Water Absorption at Equilibrium</b><br>At 20°C and 50 % R.H.                                    | <b>0.7</b>  | %  | ISO 62          |
| <b>Water Absorption</b><br>At 23°C and 24 h in water   | <b>1.1</b>  | %  |                 |
| <b>Melting Point</b>   | <b>172</b>  | °C   | ISO 11357       |
| <b>Vicat Point</b><br>Under 1 daN  | <b>164</b>  | °C   | ISO 306         |
| <b>Shrinkage (after 24 h, 4 mm, mold at 40°C)</b><br>//<br>⊥                                       | <b>1.2</b><br><b>1.5</b>  | %<br>%   | Internal method |
| <b>Hardness (*)</b><br>Instantaneous<br>After 15 s   | <b>69</b><br><b>61</b>  | Shore D<br>Shore D   | ISO 868         |
| <b>Tensile Test (*)</b><br>Stress at Break<br>Strain at Break                                      | <b>54</b><br><b>&gt;350</b>   | MPa<br>%   | ISO 527         |
| <b>Flexural Modulus (*)</b>  | <b>390</b>  | MPa  | ISO 178         |
| <b>Charpy Impact (*)</b><br>Unnotched 23°C<br>Unnotched -30°C<br>V-notched 23°C<br>V-notched -30°C | <b>No break</b><br><b>No break</b><br><b>120 (p)</b><br><b>20 (c)</b> | kJ/m <sup>2</sup><br>kJ/m <sup>2</sup><br>kJ/m <sup>2</sup><br>kJ/m <sup>2</sup> | ISO 179         |

(\*) Samples conditioned 15 days at 23°C - 50 % R.H.

(p) = Partial Break; (c) = Complete Break

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## MAIN APPLICATIONS

- Tubings like angiography and angioplasty catheters.
- Flexible injected parts.

## PROCESSING CONDITIONS

| Conditions  | Typical values                         |
|---|--|
| <b>Extrusion</b><br>Melt Temperature (Min / Recommended / Max)                                | <b>220°C / 235°C / 250°C</b>           |
| <b>Injection</b><br>Melt Temperature (Min / Recommended / Max)                                | <b>230°C / 260°C / 290°C</b>           |
| <b>Mold</b><br>Temperature  | <b>25 – 60°C</b>                       |
| <b>Drying (only necessary for bags opened for more than two hours)</b><br>Time<br>Temperature | <b>5 - 7 hours</b><br><b>70 - 80°C</b> |

## PACKAGING

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

## SHELF LIFE

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

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See Safety Data Sheet for Health & Safety Considerations.