

Product Texts

Polyether block amide **Pebax® 2533 SD 02 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SD grade is heat and UV stabilized and contains mould release additive.

Main applications:

- Flexible injected parts
- Silent gears

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.

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|------------------------|-----------------|----------------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 12 / 10 | MPa | ISO 527 |
| ^[C] Stress at 50% strain | 3 / 3 | MPa | ISO 527 |
| ^[C] Strain at break | >50 / >50 | % | ISO 527 |
| ^[C] Stress at 10% elongation | 1 / * | MPa | ISO 527 |
| ^[C] Stress at 100% elongation | 4 / * | MPa | ISO 527 |
| ^[C] Stress at break TPE | 32 / * | MPa | ISO 527 |
| ^[C] Strain at break TPE | >300 / * | % | ISO 527 |
| ^[C] Compression set at 23 °C, 24h | 19 / * | % | ISO 815 |
| ^[C] Tear strength | 44 / * | kN/m | ISO 34-1 |
| ^[C] Abrasion resistance | 130 / * | mm ³ | ISO 4649 |
| ^[C] Shore A hardness | 74 / * | - | ISO 7619-1 |
| ^[C] Shore D hardness | 22 / * | - | ISO 7619-1 |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|-------------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 134 / * | °C | ISO 11357-1/-3 |
| ^[C] Glass transition temperature, 10°C/min | -65 / * | °C | ISO 11357-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 42 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 200 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | HB / * | class | IEC 60695-11-10 |
| Thickness tested | 1.6 / * | mm | - |
| Yellow Card available | yes / * | - | - |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|-------------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 6 / - | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 6 / - | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 552 / - | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 378 / - | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | 1.3E10 / - | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | * / 3E12 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 36 / - | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | * / 600 | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|--------------------|-------------------|----------------------|
| ^[C] Water absorption | 1.2 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.4 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1000 / 1000 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 55 - 65 | °C | - |
| Pre-drying - Time | 4 - 8 | h | - |
| Melt temperature | 180 - 240 | °C | - |
| Mold temperature | 10 - 30 | °C | - |

Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

Special Characteristics

Platable, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Additives

Lubricants, Antiblocking agent

Other text information

Injection molding

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 180°C / 210°C / 240°C.
- Typical mold temperature : 10 – 30°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 55-65°C.