

Pebax® 3533 SA 01

TPA

Pebax® 3533 SA 01 resin

Polyether block amide **Pebax® 3533 SA 01 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide.
This SA grade is specially designed to food uses.

Main applications:

- Flexible injected parts.

Note: this grade is not recommended by Arkema for usage in medical applications. For such applications Pebax® SA 01 MED should be used.

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.

Rheological properties

	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical properties

	dry / cond	Unit	Test Standard
Tensile Modulus	19 / 18	MPa	ISO 527-1/-2
Stress at 50% strain	4 / 4	MPa	ISO 527-1/-2
Strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength, +23°C	- / N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	- / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	- / N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	- / N	kJ/m ²	ISO 179/1eA

Thermal properties

	dry / cond	Unit	Test Standard
Melting temperature, 10°C/min	144 / *	°C	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	77 / *	°C	ISO 306

Other properties

	dry / cond	Unit	Test Standard
Water absorption	1.2 / *	%	Sim. to ISO 62
Humidity absorption	0.4 / *	%	Sim. to ISO 62
Density	1000 / 1000	kg/m ³	ISO 1183

Test specimen production

	Value	Unit	Test Standard
Injection Molding, melt temperature	210	°C	ISO 294
Injection Molding, mold temperature	30	°C	ISO 10724

Pebax® 3533 SA 01

TPA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Strain at break TPE	>300 / *	%	ISO 527-1/-2
Stress at break TPE	39 / *	MPa	ISO 527-1/-2
Shore A hardness, 3s	82 / *	-	ISO 7619-1
Shore D hardness, 15s	25 / *	-	ISO 7619-1

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.

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 190°C / 205°C / 220°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 55-65°C.

Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Pellets

Additives

Lubricants

Regional Availability

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