

TECHNICAL DATA SHEET

PEBAX® 2533 SA 01 MED

POLYETHER BLOCK AMIDE PELLET

PEBAX® 2533 SA 01 MED is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This natural grade offers the highest quality and is approved in medical applications. Upon request, letters regarding USP Class VI compliance can be provided.

TYPE

PEBA

MAIN APPLICATIONS

- Hygiene - Dental Floss
- Health - Consumable - Others
- Health - Consumable - Catheters
- Other Medical

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Film Extrusion
- Injection Molding
- Tube Extrusion

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Shrinkage, Parallel (t+24h)	0.4	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.7	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min	12 / 10	MPa	ISO 527-1/-2
Stress at 50% strain, 23°C (73°F), 50 mm/min	3 / 3	MPa	ISO 527-1/-2
Stress at 10% strain, 23°C (73°F), 50 mm/min	1 / -	MPa	ISO 527-1/-2
Stress at 100% strain, 23°C (73°F), 50 mm/min	4 / -	MPa	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	- / 32	MPa	ISO 527-1/-2
Hardness, Shore A, 15 s	- / 74		ISO 868
Hardness, Shore D, 15 s	- / 22		ISO 868
Charpy notched impact strength, 23°C (73°F)	No Break / No Break		ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	No Break / No Break		ISO 179 1eA
Charpy unnotched impact strength, 23°C (73°F)	No Break / No Break		ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No Break / No Break		ISO 179 1eU
Flexural modulus, 23°C (73°F)	- / 12	MPa	ISO 178
Nominal strain at break, 23°C (73°F), 50 mm/min	> 750 / > 750	%	ISO 527-1/-2

*DRY: Dry As Molded (DAM) if pellet / Dry if powder.
COND: Conditioned.

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	134	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-65	°C	ISO 11357-1/-2

ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Surface resistivity, 23°C (73°F)	- / 3.0E+12	Ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73°F)	- / 1.3E+10	Ohm.m	IEC 62631-3-1
Comparative tracking index, 23°C (73°F)	- / 600		IEC 60112
Dielectric stress, 23°C (73°F)	- / 36	kV/mm	IEC 60243-1
Relative permittivity, 100Hz	- / 6		IEC 62631-2-1
Relative permittivity, 1Mhz	- / 6		IEC 62631-2-1
Dissipation factor, 100Hz	552 / -	E-4	IEC 62631-2-1
Dissipation factor, 1Mhz	378 / -	E-4	IEC 62631-2-1

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COND: Conditioned.

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.4	%	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	1.2	%	ISO 62
Specific gravity, 23°C (73°F)	1	g/cm ³	ISO 1183-1

PACKAGING

Available packaging:

- 25 kg / 55 lb bags
- 550 kg rigid containers

SHELF LIFE

Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 180°C / 210°C / 240°C (355°F / 410°F / 465°F)
- Typical mold temperature - Injection molding: 10-30°C (50-90°F)
- Drying time and temperature: 55-65°C (130-150°F) / 4-8 hours

REGIONAL AVAILABILITY

Africa, Asia Pacific, Europe, Latin America and the Caribbean, Middle East, Northern America, Oceania

PEBAX® 2533 SA 01 MED

DIAGRAMS

