PEBAX®

TECHNICAL DATA SHEET

PEBAX® 2533 SD 02

POLYETHER BLOCK AMIDE PELLET

PEBAX® 2533 SD 02 is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SD grade is heat & UV stabilized and contains mold release additive. It is used in sport and consumer applications.

TYPE

PEBA

MAIN APPLICATIONS

- Beauty, perfumes, & cosmetics

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

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

ADDITIVES

- Release agent

RHEOLOGICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Shrinkage, parallel (t+24h)	0.6	%	ISO 294-4
Shrinkage, normal (t+24h)	0.7	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Flexural modulus, 23°C (73°F)	- / 12	MPa	ISO 178
Tensile modulus, 23°C (73°F)	12 / 10	MPa	ISO 527-1/-2
Stress at 50% strain, 23°C (73°F)	- / 3	MPa	ISO 527-1/-2
Stress at break, 23°C (73°F)	- / 32	MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F)	> 750 / > 750	%	ISO 527-1/-2
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
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
Hardness, shore A, 15 s	- / 74		ISO 868
Hardness, shore D, 15 s	- / 22		ISO 868
Compression set	19 / -	%	ISO 815
Abrasion resistance	130 / -	mm^3	ISO 4649

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

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THERMAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Glass transition temperature, 10°C/min	-65	°C	ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	42	°C	ISO 75-1/-2
Melting temperature, 10°C/min	134	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Surface resistivity, 23°C (73,4°F)	- / 1E+13	ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 3E+09	ohm.m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600		IEC 60112
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
Dielectric Strength, 23°C (73,4°F)	- / 36	kV/mm	IEC 60243-1

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COND: Conditionned.

OTHER PROPERTIES

PROPERTIES	TYPICAL VALUE	UNIT	TEST STANDARD
Water absorption, at equilibrium at 23°C (73°F) / 50%RH	0.4	%	ISO 62
Density, 23°C (73°F)	1	g/cm³	ISO 1183-1
Water absorption, at equilibrium at 23°C (73°F) / Immersion	1.2	%	ISO 62

PACKAGING

Available packaging:
- 25 kg / 55 lb bags

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:

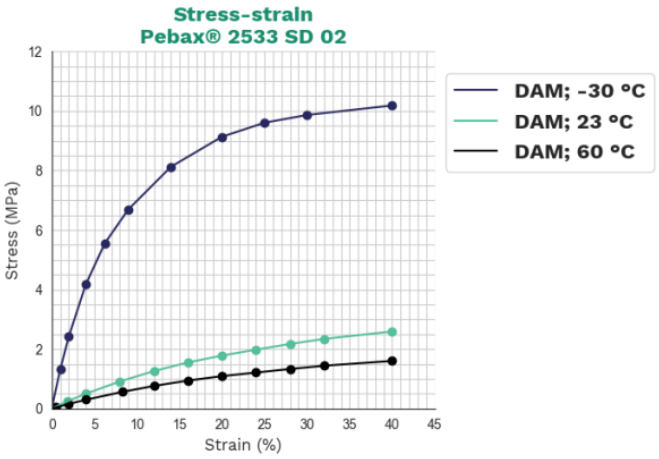
- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 180°C / 210°C / 240°C (355°F / 410°F / 465°F)
- Typical mold temperature - Injection molding: 10-30°C (50-90°F)
- Drying time and temperature: 55-65°C (130-150°F) / 4-8 hours

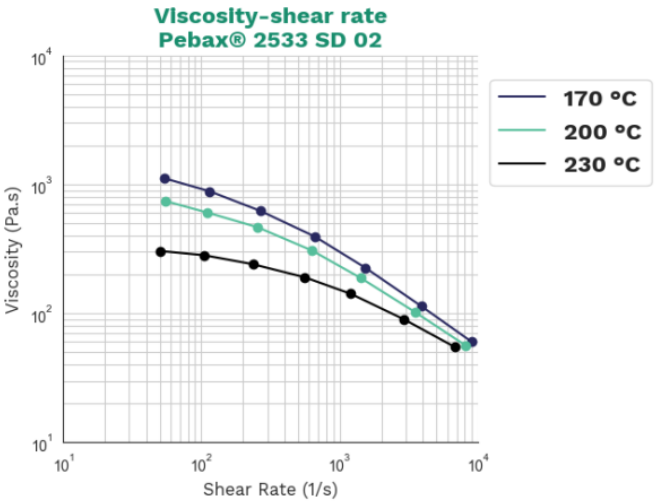
REGIONAL AVAILABILITY

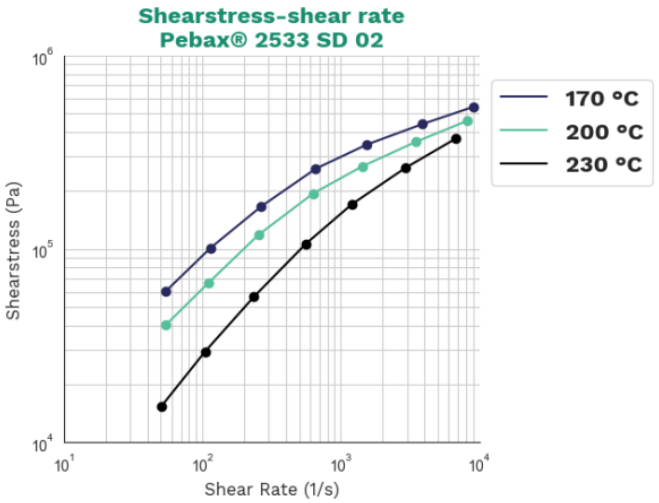
Asia Pacific, Europe, Latin America and the Caribbean, Middle East, Northern America

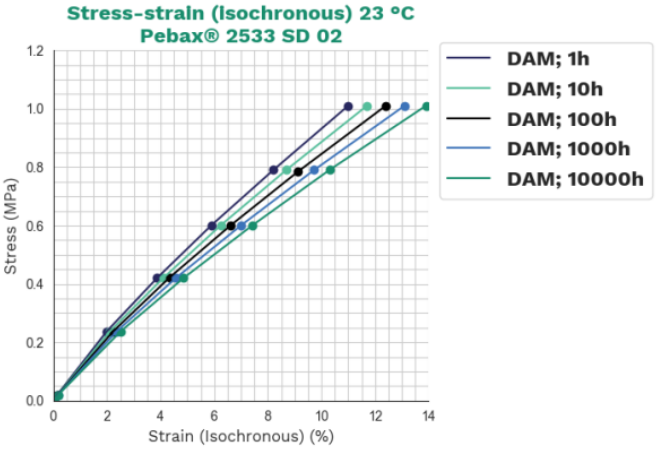
DIAGRAMS

PEBAX® 2533 SD 02









Headquarters: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80

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