PEBAX®

TECHNICAL DATA SHEET

PEBAX® 7033 SP 01

POLYETHER BLOCK AMIDE PELLET

PEBAX® 7033 SP 01 is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SP grade is heat & UV stabilized. It is used in sport and consumer applications.

DESIGNATION

PEBA

MAIN APPLICATIONS

- Winter Sports - Ski Boots
- Footwear - Outsole/Components

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

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

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Shrinkage, Parallel (t+24h)	0.9 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.1 %	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Hardness, Shore D, 15 s	- / 61	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	- / No Break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / No Break	ISO 179 1eU
Charpy notched impact strength, -30°C (-22°F)	- / 20 kJ/m2	ISO 179 1eA
Charpy notched impact strength, 23°C (73°F)	- / 120 kJ/m2	ISO 179 1eA
Tensile modulus, 23°C (73°F), 1 mm/min	414 / 384 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	22 / 20 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	23 / 22 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 350 / > 350 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 390 MPa	ISO 178
Stress at break, 23°C (73°F), 50 mm/min	- / 54 MPa	ISO 527-1/-2
Abrasion resistance	41 / - mm^3	ISO 4649

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

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THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Vicat softening temperature, 50N at 50°C/h	106 °C	ISO 306
Heat deflection temperature, 0.45 MPa	99 °C	ISO 75-1/-2
Melting temperature, 10°C/min	172 °C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Surface resistivity, 23°C (73,4°F)	- / 4.0E+13 ohm/sq	IEC 62631-3-2
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112

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OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.7 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	1.1 %	ISO 62
Specific gravity, 23°C (73°F)	1.01 g/cm³	ISO 1183-1

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:
- 20 kg / 44 lb bags
- 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: 230°C / 260°C / 290°C (445°F / 500°F / 555°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 70-80°C (160-175°F) / 4-6 hours

REGIONAL AVAILABILITY

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

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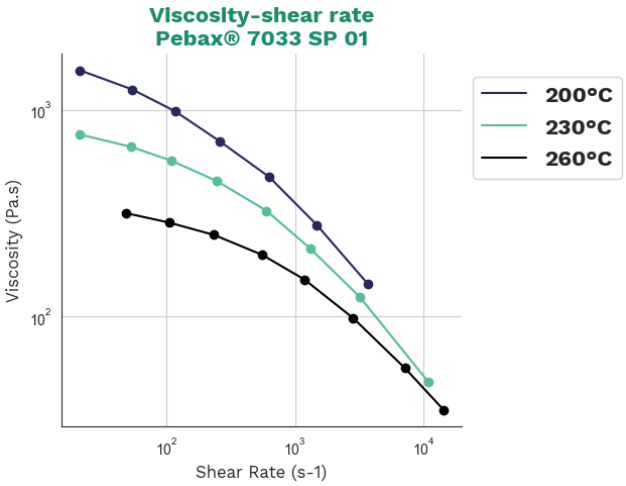
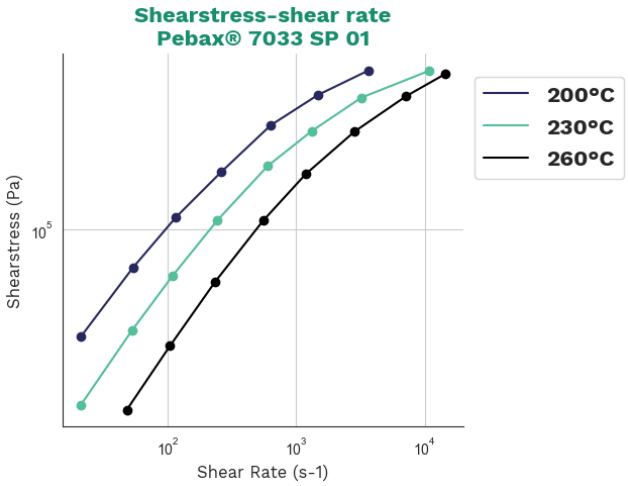
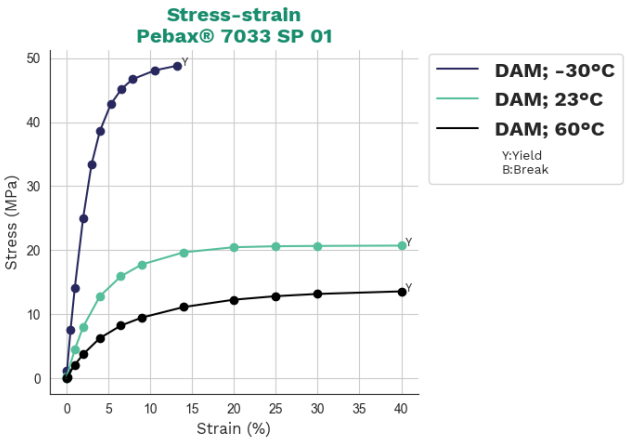
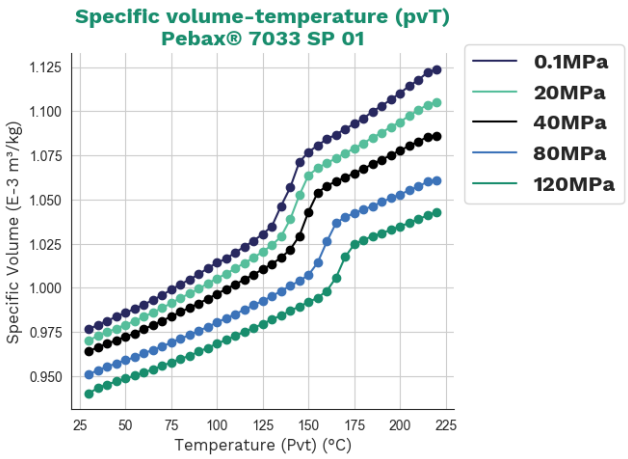
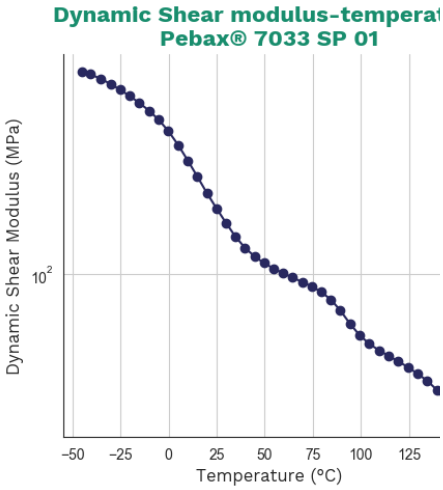
DIAGRAMS

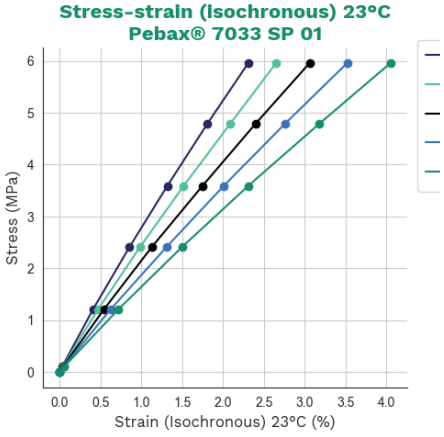


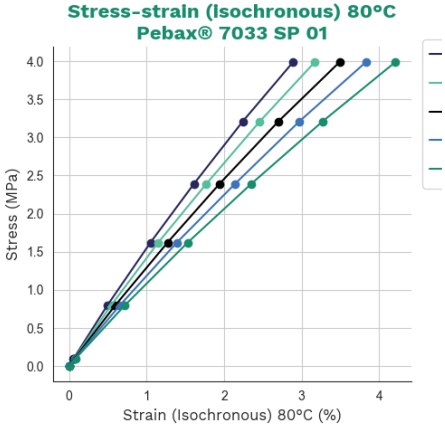












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