

## TECHNICAL DATA SHEET

# PEBAX® 4033 SP 01

## POLYETHER BLOCK AMIDE PELLET

PEBAX® 4033 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 - Insole/Midsole/Foam
- Frames
- Outdoor - Apparel
- Monofilament
- Breathable Films - Housewrap
- Industry - Distribution
- Antistatics

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

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

### ADDITIVES

- Heat Stabilized
- Light Stabilized

## RHEOLOGICAL PROPERTIES

プロパティ	価値	テスト基準
Shrinkage, Parallel (t+24h)	0.6 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.3 %	ISO 294-4

## MECHANICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Compression set	32 / - %	ISO 815
Hardness, Shore A, 15 s	- / 89	ISO 868
Hardness, Shore D, 15 s	- / 35	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, 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
Stress at 50% strain, 23°C (73°F), 50 mm/min	9 / 9 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	73 / 71 MPa	ISO 527-1/-2
Abrasion resistance	48 / - mm <sup>3</sup>	ISO 4649
Flexural modulus, 23°C (73°F)	- / 77 MPa	ISO 178
Stress at break, 23°C (73°F), 50 mm/min	- / 40 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 450 / > 450 %	ISO 527-1/-2

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

## THERMAL PROPERTIES

プロパティ	価値	テスト基準
Glass transition temperature, 10°C/min	-65 °C	ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	52 °C	ISO 75-1/-2
Melting temperature, 10°C/min	160 °C	ISO 11357-1/-3

## ELECTRICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Surface resistivity, 23°C (73,4°F)	- / 3.0E+12 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 2.6E+11 ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Dielectric stress, 23°C (73,4°F)	- / 39	IEC 60243-1
Relative permittivity, 100Hz	- / 7	IEC 60250
Relative permittivity, 1Mhz	- / 5	IEC 60250
Dissipation factor, 100Hz	- / 710	IEC 60250
Dissipation factor, 1Mhz	- / 710	IEC 60250

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## OTHER PROPERTIES

プロパティ	価値	テスト基準
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.5 %	ISO 62
Water absorption, 23°C(73°F), immersion, equilibrium	1.2 %	ISO 62
Specific gravity, 23°C (73°F)	1 g/cm <sup>3</sup>	ISO 1183-1

## 包装

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

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

## 賞味期限

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:

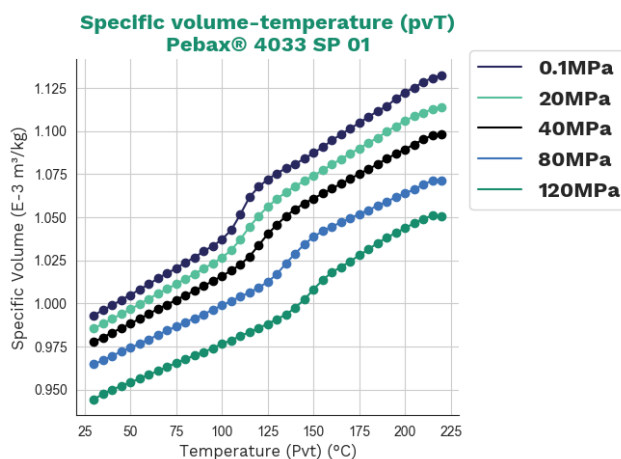
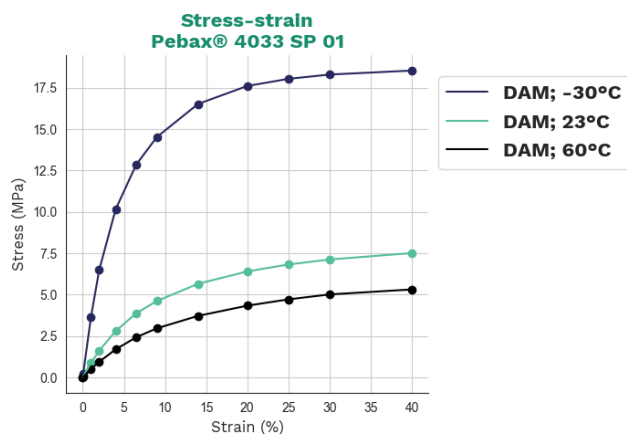
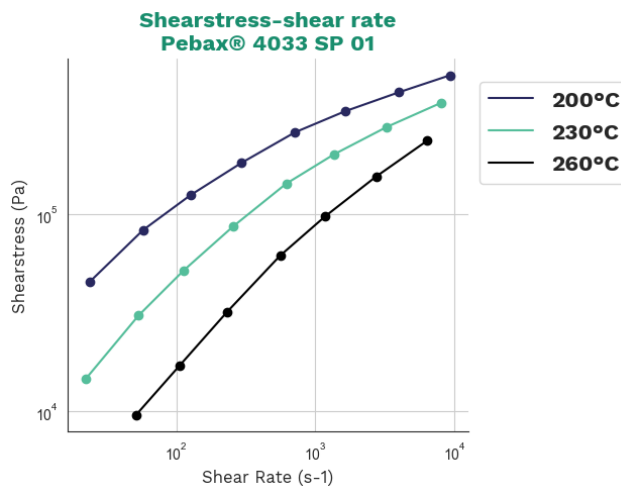
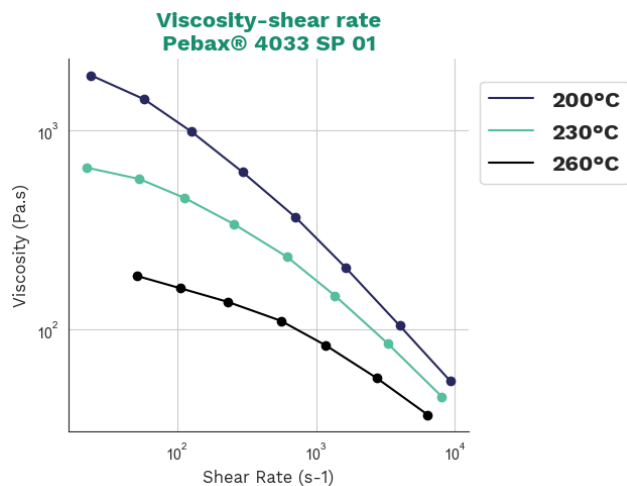
- 典型的な溶融温度 (最小 / 推奨 / 最大) - 射出成形: 210°C / 240°C / 270°C (410°F / 430°F / 520°F)
- 典型的な金型温度 - 射出成形: 10-30°C (50-90°F)
- Drying time and temperature: 60-70°C (140-160°F) / 4-8 hours

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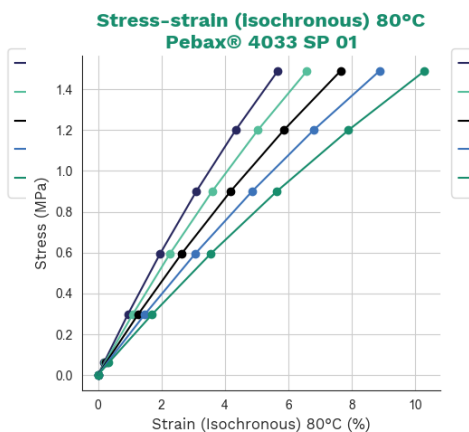
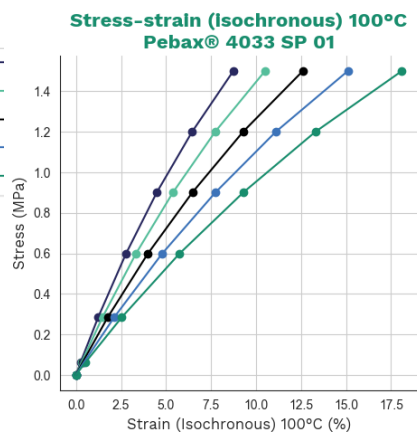
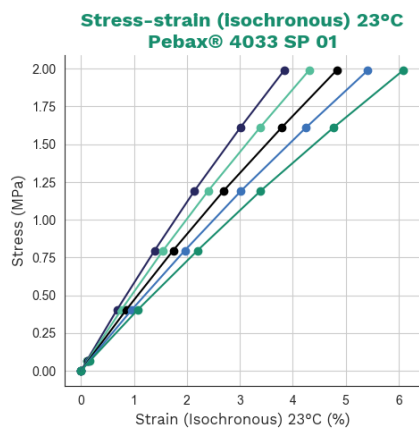
## REGIONAL AVAILABILITY

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

## DIAGRAMS



# PEBAX® 4033 SP 01



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