

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

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

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

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

| 속성 | 값 | 테스트 표준 |
|-----------------------------|-------|-----------|
| Shrinkage, Parallel (t+24h) | 0.9 % | ISO 294-4 |
| Shrinkage, Normal (t+24h) | 1.1 % | ISO 294-4 |

MECHANICAL PROPERTIES

| 속성 | DRY / COND VALUE* | 테스트 표준 |
|---|---------------------------|--------------|
| 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/m ² | ISO 179 1eA |
| Charpy notched impact strength, 23°C (73°F) | - / 120 kJ/m ² | 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.

PEBAX® 7033 SP 01

COND: Conditionned.

| 속성 | 값 | 테스트 표준 |
|--|--------|----------------|
| 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 |

THERMAL PROPERTIES ELECTRICAL PROPERTIES

| 속성 | DRY / COND VALUE* | 테스트 표준 |
|---|--------------------|---------------|
| 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 |

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

OTHER PROPERTIES

| 속성 | 값 | 테스트 표준 |
|--|------------------------|------------|
| 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/cm ³ | ISO 1183-1 |

PACKAGING

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

- 21 kg / 44 lb bags
- 26 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.

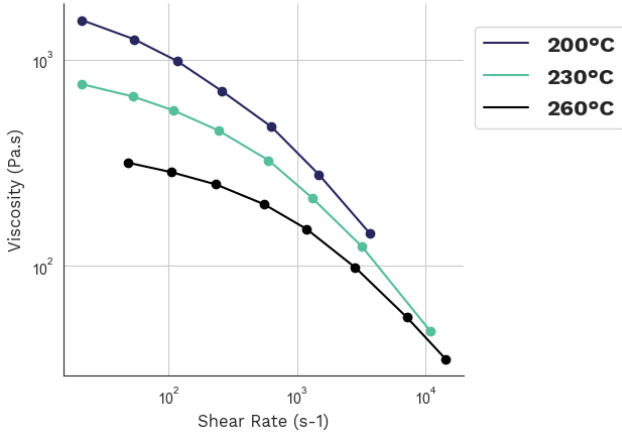
PROCESSING CONDITIONS:

- 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

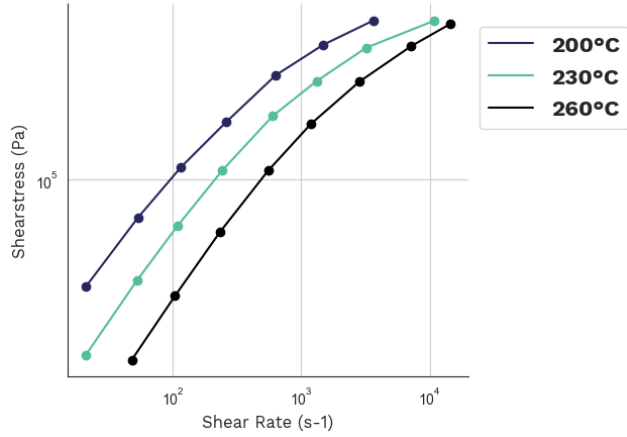
PEBAX® 7033 SP 01

DIAGRAMS

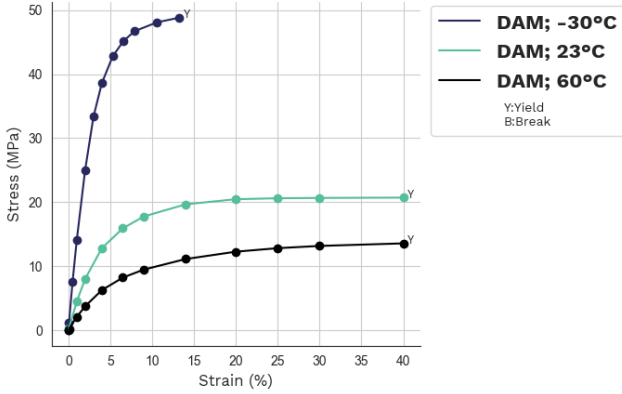
Viscosity-shear rate
Pebax® 7033 SP 01



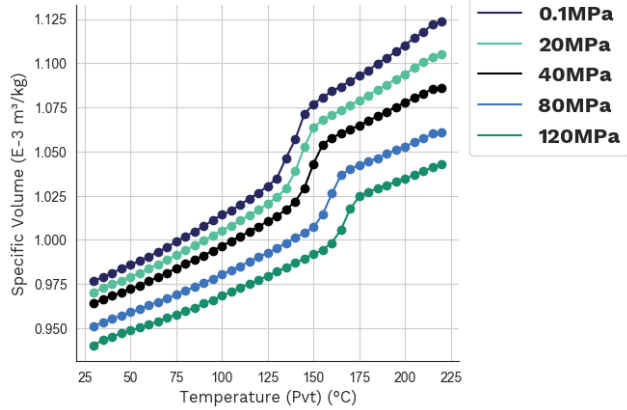
Shearstress-shear rate
Pebax® 7033 SP 01



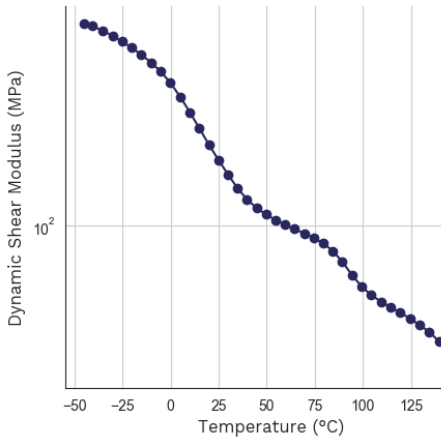
Stress-strain
Pebax® 7033 SP 01



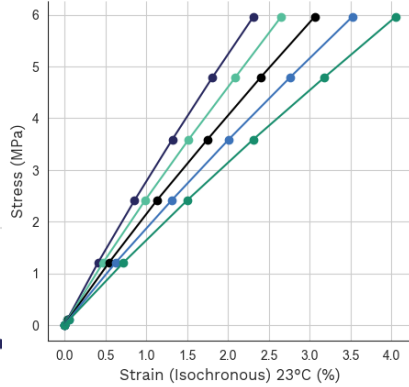
Specific volume-temperature (pvT)
Pebax® 7033 SP 01



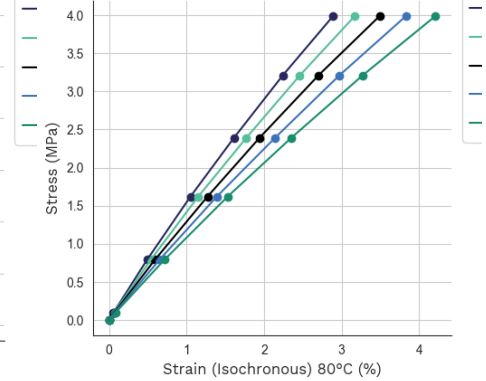
Dynamic Shear modulus-tempera
Pebax® 7033 SP 01



Stress-strain (Isochronous) 23°C
Pebax® 7033 SP 01



Stress-strain (Isochronous) 80°C
Pebax® 7033 SP 01



PEBAX® 7033 SP 01

Headquarter: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
T +33 (0)1 49 00 80 80

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

ARKEMA