

## TECHNICAL DATA SHEET

# PEBAX® 3533 SP 01

## POLYETHER BLOCK AMIDE PELLET

PEBAX® 3533 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)	0.2 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.2 %	ISO 294-4

## MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Compression set	22 / - %	ISO 815
Hardness, Shore A, 15 s	- / 80	ISO 868
Hardness, Shore D, 15 s	- / 25	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	4 / 4 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	19 / 18 MPa	ISO 527-1/-2
Abrasion resistance	64 / - mm <sup>3</sup>	ISO 4649
Flexural modulus, 23°C (73°F)	- / 21 MPa	ISO 178
Stress at break, 23°C (73°F), 50 mm/min	- / 39 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 600 / > 600 %	ISO 527-1/-2

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

속성	값	테스트 표준
Glass transition temperature, 10°C/min	-65 °C	ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	46 °C	ISO 75-1/-2
Melting temperature, 10°C/min	144 °C	ISO 11357-1/-3

## THERMAL PROPERTIES/ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Surface resistivity, 23°C (73,4°F)	- / 3.0E+12 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 3.2E+10 ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Dielectric stress, 23°C (73,4°F)	- / 33.5	IEC 60243-1
Relative permittivity, 100Hz	- / 6	IEC 60250
Relative permittivity, 1Mhz	- / 6	IEC 60250
Dissipation factor, 100Hz	- / 310	IEC 60250
Dissipation factor, 1Mhz	- / 310	IEC 60250

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## OTHER PROPERTIES

속성	값	테스트 표준
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 <sup>3</sup>	ISO 1183-1

## PACKAGING

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

- 26 kg / 55 lb bags

## SHELF LIFE

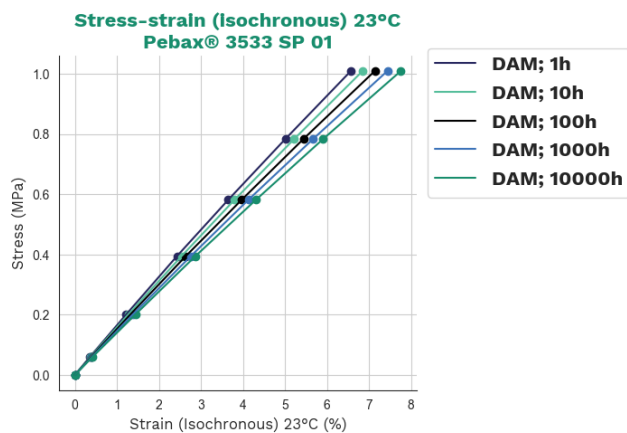
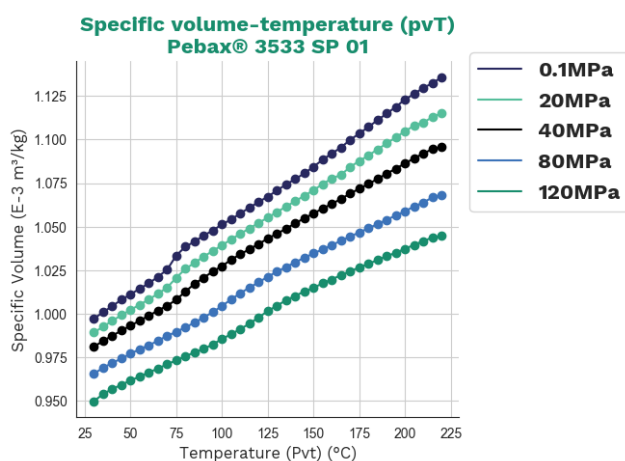
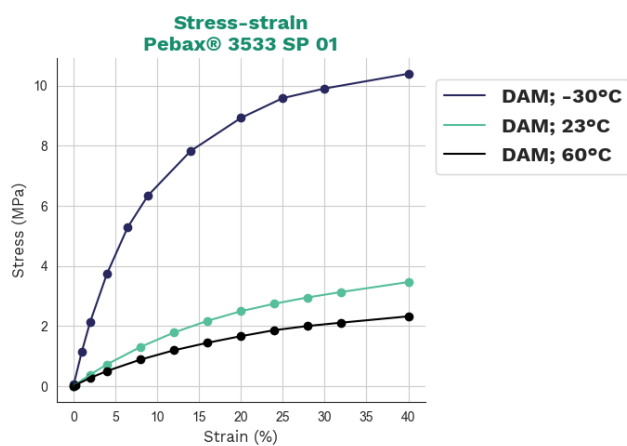
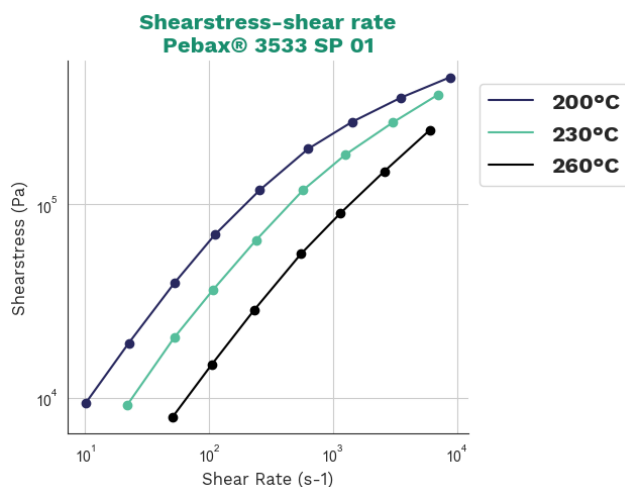
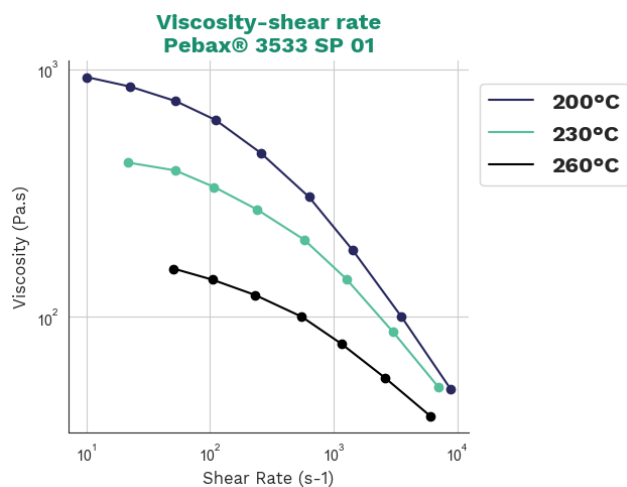
Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

## PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 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

# PEBAX® 3533 SP 01

## DIAGRAMS



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