

TECHNICAL DATA SHEET

PEBAX® 5513 SP 01

POLYETHER BLOCK AMIDE PELLET

PEBAX® 5513 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. Added to PA6, PEBAX® 5513 SP 01 enhances the properties of PA6, especially at low temperatures and low humidity content, while maintaining the transparency of the polyamide film and improving its soft touch.

DESIGNATION

PEBA

MAIN APPLICATIONS

- Industry - Others
- Industry - Distribution
- Additives PA6

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)	0.7 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.8 %	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Hardness, Shore D, 15 s	- / 54	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
Nominal strain at break, 23°C (73°F), 50 mm/min	> 500 / > 500 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	32 / 30 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	14 / 13 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 180 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 34 kJ/m ²	ISO 179 1eA
Stress at break, 23°C (73°F), 50 mm/min	- / 60 MPa	ISO 527-1/-2

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

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THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Vicat softening temperature, 50N at 50°C/h	169 °C	ISO 306
Melting temperature, 10°C/min	195 °C	ISO 11357-1/-3

OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	1.3 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	6.7 %	ISO 62
Specific gravity, 23°C (73°F)	1.09 g/cm ³	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
- 454 kg / 1000 lb rigid containers

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: 210°C / 240°C / 270°C (410°F / 430°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 65-75°C (150-165°F) / 4-6 hours

REGIONAL AVAILABILITY

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

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