PEBAX®

TECHNICAL DATA SHEET

PEBAX® RNEW® 1100

POLYETHER BLOCK AMIDE PELLET

PEBAX® Rnew 1100 resin offers an excellent combination of high impact resistance, stiffness and lightness. In addition to high energy return, the main future of Pebax® materials, this grade will bring high performance to a wide range of sport applications: winter sports, team sports. Pebax® Rnew 1100 resin is produced from a renewable source.

DESIGNATION

PEBA

MAIN APPLICATIONS

- Footwear - Outsole/Components
- Industry - Distribution

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

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

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Shrinkage, Parallel (t+24h)	0.3 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.3 %	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Nominal strain at break, 23°C (73°F), 50 mm/min	- / 245 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 5 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 39 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 1100 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 80 kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 30 kJ/m2	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1090 MPa	ISO 178
Stress at break, 23°C (73°F), 50 mm/min	- / 42 MPa	ISO 527-1/-2

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

THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melting temperature, 10°C/min	187 °C	ISO 11357-1/-3

OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	0.999 g/cm³	ISO 1183-1

PEBAX® RNEW® 1100

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:
- 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: 10-30°C (50-90°F)
- Drying time and temperature: 70-80°C (160-175°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based

REGIONAL AVAILABILITY

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

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