

TECHNICAL DATA SHEET

PEBAX® RNEW® 80R53 SP 02

POLYETHER BLOCK AMIDE PELLET

PEBAX® RNEW® 80R53 SP 01 is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. It is partially produced from a renewable & sustainable source (castor oil). This natural 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)	1.2 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.3 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 67	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	- / > 300 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 24 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 33 MPa	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 840 MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	- / 944 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 44 kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 16 kJ/m2	ISO 179 1eA
Stress at break, 23°C (73°F), 50 mm/min	- / 52 MPa	ISO 527-1/-2

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

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속성	값	테스트 표준
Melting temperature, 10°C/min	188 °C	ISO 11357-1/-3

OTHER PROPERTIES

속성	값	테스트 표준
Bio-based carbon content, Measured	92 %	ASTM D6866
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.8 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	0.7 %	ISO 62
Specific gravity, 23°C (73°F)	1.02 g/cm ³	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.

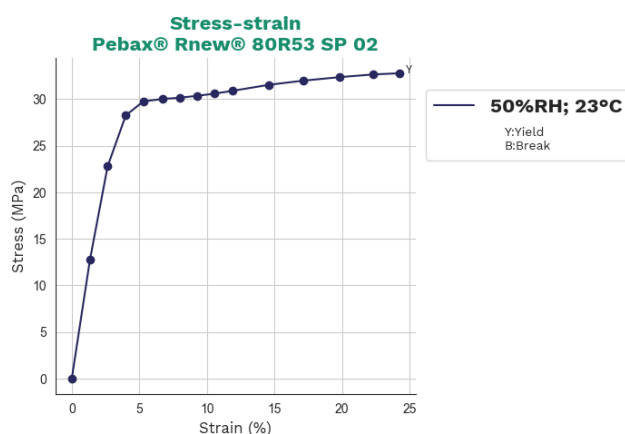
PROCESSING CONDITIONS:

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

SPECIAL CHARACTERISTICS

- Bio-based

DIAGRAMS



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

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