

## TECHNICAL DATA SHEET

# PEBAX<sup>®</sup> RNEW<sup>®</sup> 40F19 SP 03

## POLYETHER BLOCK AMIDE PELLET

PEBAX<sup>®</sup> RNEW 40F19 SP 03 is a thermoplastic elastomer made of flexible polyether and rigid polyamide, based on renewable resources.

### DESIGNATION

PEBA

### MAIN APPLICATIONS

- Footwear - Insole/Midsole/Foam
- Industry - Distribution

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Injection Molding

### ADDITIVES

- Heat Stabilized
- Light Stabilized

## RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melt volume flow rate (MVR) (220°C/2.16 Kg)	9 cm <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy unnotched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No Break / No Break	ISO 179 1eU
Tensile modulus, 23°C (73°F), 1 mm/min	95 / 92 MPa	ISO 527-1/-2
Stress at 50% strain, 23°C (73°F), 50 mm/min	9 / 9 MPa	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	>28 / >28 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	>700 / >700 %	ISO 527-1/-2
Hardness, Shore D, 15 s	- / 38	ISO 868

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

## THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melting temperature, 10°C/min	146 °C	ISO 11357-1/-3

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## OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Bio-based carbon content, Measured	46 %	ASTM D6866
Specific gravity, 23°C (73°F)	1.026 g/cm <sup>3</sup>	ISO 1183-1

## 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: 210°C / 230°C / 250°C (410°F / 445°F / 480°F)
- Typical mold temperature - Injection molding: 10-30°C (50-90°F)
- Drying time and temperature: 60-70°C (140-160°F) / 4-8 hours

## SPECIAL CHARACTERISTICS

- Bio-based

## REGIONAL AVAILABILITY

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

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