

TECHNICAL DATA SHEET

PEBAX® CLEAR 800

POLYETHER BLOCK AMIDE PELLET

PEBAX® Clear 800 combines transparency, toughness and stiffness with the unique performance of Pebax® thermoplastic elastomer.

TYPE

PEBA

MAIN APPLICATIONS

- Footwear - Outsole/Components
- Frames
- Accessories

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Shrinkage, Parallel (t+24h) (2mm thick plate, mold at 40°C)	0.7	%	ISO 294-4
Shrinkage, Normal (t+24h) (2mm thick plate, mold at 40°C)	0.7	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Flexural modulus, 23°C (73°F)	- / 850	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	- / 900	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 29	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 6	%	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	- / 38	MPa	ISO 527-1/-2
Strain at break, 23°C (73°F), 50 mm/min	- / > 200	%	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 40	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 22	kJ/m2	ISO 179 1eA
Charpy unnotched impact strength, 23°C (73°F)	/ No Break	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	/ No Break	kJ/m2	ISO 179 1eU
Hardness, Shore D, Instantaneous	/ 75		ISO 868
Hardness, Shore D, 15 s	- / 69		ISO 868

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

COND: Conditionned.

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	188	°C	ISO 11357-1/-3

PEBAX® CLEAR 800

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Bio-based carbon content	59	%	ASTM D6866
Transmittance (2mm thick plate)	80	%	ISO 13468-1/-2

PACKAGING

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: 270°C / 285°C / 300°C (520°F / 545°F / 570°F)
- Typical mold temperature - Injection molding: 40-80°C (105-175°F)
- Drying time and temperature: 60-70°C (140-160°F) / 4-8 hours

SPECIAL CHARACTERISTICS

- Transparent

REGIONAL AVAILABILITY

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