

TECHNICAL DATA SHEET

PEBAX® MH 1657

POLYETHER BLOCK AMIDE PELLET

PEBAX® MH 1657 is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This hydrophilic grade, when extruded into either a thin film or laminated on to a substrate, offers excellent permeability to moisture vapor while remaining waterproof. PEBAX® MH 1657 is an inherently dissipative polymer and can be dry blended or compounded with an isolative polymer to lower the surface resistivity of the final part.

DESIGNATION

PEBA

MAIN APPLICATIONS

- Film
- Antistatics

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding
- Thermoforming

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Shrinkage, Parallel (t+24h)	0.7 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.7 %	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Hardness, Shore D, 15 s	- / 40	ISO 868
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
Stress at 50% strain, 23°C (73°F), 50 mm/min	13 / 12 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	90 / 80 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 80 MPa	ISO 178

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

THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Glass transition temperature, 10°C/min	-40 °C	ISO 11357-1/-2
Melting temperature, 10°C/min	204 °C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Surface resistivity, 23°C (73,4°F)	- / 1.5E+9 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 2.0E+7 ohm/m	IEC 62631-3-1

PEBAX® MH 1657

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

OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	4.5 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	120 %	ISO 62
Specific gravity, 23°C (73°F)	1.14 g/cm ³	ISO 1183-1

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 25 kg / 55 lb bags
- 550 kg 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: 10-30°C (50-90°F)
- Drying time and temperature: 60-70°C (140-160°F) / 4-8 hours

SPECIAL CHARACTERISTICS

- Anti-static

REGIONAL AVAILABILITY

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

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

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

ARKEMA