

PEBAX® MH 1657

Polyether block amide Pebax® MH 1657 resin is a thermoplastic elastomer made of flexible polyether and rigid polyamide.

Pebax® MH 1657 resin 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.

This hydrophilic grade when extruded into either a thin film or laminated on to a substrate also offers excellent permeability to moisture vapor while remaining waterproof.

Main applications:

- Breathable membranes.
- Permanent antistatic additive.

Packaging:

This grade is delivered dried in sealed packaging (25 kg bags and 550 kg rigid containers) ready to be processed.

Shelf Life:

Two years from the delivery. For any use above this limit, please refer to our technical services.

MAIN CHARACTERISTICS

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
Tensile Modulus	13100 / 11600	psi	ISO 527-1/-2
Stress at 50% strain	1890 / 1740	psi	ISO 527-1/-2
Strain at break	> 50 / > 50	%	ISO 527-1/-2
Charpy impact strength, +23°C	N / N	ftlb/in ²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	ftlb/in ²	ISO 179/1eU
Charpy notched impact strength, +23°C	N / N	ftlb/in ²	ISO 179/1eA
Melting temperature, 10°C/min	399 / *	°F	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-40 / *	°F	ISO 11357-1/-2
Volume resistivity	- / 2E7	Ohm*m	IEC 60093
Surface resistivity	* / 1.5E9	Ohm	IEC 60093
Water absorption	120 / *	%	Sim. to ISO 62
Humidity absorption	4.5 / *	%	Sim. to ISO 62
Density	1.14 / -	g/cm ³	ISO 1183
Injection Molding, melt temperature	464	°F	ISO 294
Injection Molding, mold temperature	86	°F	ISO 10724

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 230°C / 240°C / 260°C.
- Typical mold temperature: 25–60°C.
- Drying time and temperature (only necessary for bags/containers opened for more than two hours): 5-7 hours at 70-90°C.

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 230°C / 250°C / 280°C.
- Drying time and temperature (only necessary for bags/containers opened for more than two hours): 5-7 hours at 70-90°C.

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

Delivery form

Pellets

Chemical Media Resistance

Acids

- ✓ Sulfuric Acid (38% by mass) (23°C)

Bases

- ✓ Sodium Hydroxide solution (1% by mass) (23°C)

Hydrocarbons

- ✓ iso-Octane (23°C)

Salt solutions

- ✓ Zinc Chloride solution (50% by mass) (23°C)

Other

- ✓ Water (23°C)

Special Characteristics

Increased electrical conductivity, Anti-static, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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