Pebax® MH 1657

TPA ARKEMA

Product Texts

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 antistactic 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.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**90 / 80**	MPa	ISO 527
[C] Stress at 50% strain	**13 / 12**	MPa	ISO 527
[C] Strain at break	**>50 / >50**	%	ISO 527
[C] Shore D hardness	**40 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**204 / ***	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**-40 / ***	°C	ISO 11357-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**- / 2E7**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / 1.5E9**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**120 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**4.5 / ***	%	Sim. to ISO 62
[C] Density	**1140 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**70 - 90**	°C	-
Pre-drying - Time	**5 - 7**	h	-
Melt temperature	**230 - 260**	°C	-
Mold temperature	**25 - 60**	°C	-

Characteristics

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

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

Delivery form
Pellets

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

Other text information

Injection molding

Injection molding process 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.

Other extrusion

Extrusion process 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.