

# 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.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
MECHANICAL PROPERTIES			
Tensile Modulus	90 / 80	MPa	ISO 527-1/-2
	13100 / 11600	psi	
Stress at 50% Strain	13 / 12	MPa	ISO 527-1/-2
	1890 / 1740	psi	
Strain at Break	>50 / >50	%	ISO 527-1/-2
Charpy Impact Strength, +23°C	No Break / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	No Break / No Break	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	204 / *	°C	ISO 11357-1/-3
Glass Transition Temperature, 10°C/min	-40 / *	°C	ISO 11357-1/-2
ELECTRICAL PROPERTIES			
Volume Resistivity	- / 2E7	Ohm*m	IEC 60093
Surface Resistivity	* / 1.5E9	Ohm	IEC 60093
OTHER PROPERTIES			
Water Absorption	120 / *	%	Sim. to ISO 62
Humidity Absorption	4.5 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m³	ISO 1183
	1.14 / -	g/cm³	

## 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.

## Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 230°C / 240°C / 260°C.

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## MH 1657

- 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.

<b>PROCESSING</b>  Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming	
<b>DELIVERY FORM</b>  Pellets	
<b>SPECIAL CHARACTERISTICS</b>  Anti-Static, Heat Stabilized	
<b>REGIONAL AVAILABILITY</b>  North America, Europe, Asia Pacific, South and Central America, Near East/Africa	