

# 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 CHARACTERISTICS

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

## 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.
- 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.

# PEBAX® MH 1657

## PROCESSING

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

## DELIVERY FORM

Pellets

## SPECIAL CHARACTERISTICS

Anti-Static, Heat Stabilized

## REGIONAL AVAILABILITY

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

Please consult Arkema's disclaimer regarding the use of Arkema's products on  
<https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

Pebax® is a registered trademark of Arkema  
© 2022 Arkema Inc. All rights reserved.

[pebax.com](http://pebax.com)

**Arkema Inc. – Technical Polymers**  
900 First Avenue  
King of Prussia, PA 19406  
Tel.: +1 610 205 7000  
Fax: +1 610 205 7497  
[arkema-americas.com](http://arkema-americas.com)

**PEBAX®**  
BY ARKEMA  
**Headquarters: Arkema France**  
420, rue d'Estienne d'Orves  
92705 Colombes Cedex – France  
Tel.: +33 1 49 00 80 80  
Fax: +33 1 49 00 83 96  
[arkema.com](http://arkema.com)