

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
RHEOLOGICAL PROPERTIES			
Molding Shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
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
Shore D Hardness, after 15 s	40 / *	-	ISO 868
Charpy Impact Strength, +23°C	No Break / No Break	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break / No Break	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	No Break / No Break	kJ/m ²	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 62631-3-1
Surface Resistivity	* / 1.5E9	Ohm	IEC 62631-3-2
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	120 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	4.5 / *	%	ISO 62
Density	1140 / -	kg/m ³	ISO 1183
	1.14 / -	g/cm ³	

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.

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 12-08-2024

PEBAX[®]

MH 1657

SHELF LIFE:

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

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.

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.

PROCESSING Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com
DELIVERY FORM Pellets	Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
SPECIAL CHARACTERISTICS Anti-Static, Heat Stabilized	
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.