

Pebax® MH 1657

TPA

Pebax® MH 1657 resin

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.

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	90 / 80	MPa	ISO 527-1/-2
Stress at 50% strain	13 / 12	MPa	ISO 527-1/-2
Strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
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	dry / cond	Unit	Test Standard
Volume resistivity	- / 2E7	Ohm*m	IEC 60093
Surface resistivity	* / 1.5E9	Ohm	IEC 60093

Other properties	dry / cond	Unit	Test Standard
Water absorption	120 / *	%	Sim. to ISO 62
Humidity absorption	4.5 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m ³	ISO 1183

Test specimen production	Value	Unit	Test Standard
Injection Molding, melt temperature	240	°C	ISO 294
Injection Molding, mold temperature	30	°C	ISO 10724

Characteristics

Processing

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

Delivery form

Pellets

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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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)