

Pebax® MV 1074 SA 01 MED

TPA

ARKEMA

Polyether block amide **Pebax® MV 1074 SA 01 MED resin** is a thermoplastic elastomer made of flexible and hydrophilic polyether and rigid polyamide.

Hydrophilic **Pebax® MV 1074 SA 01 MED resin** is suitable for extrusion or coextrusion and offers excellent high moisture absorption properties in wet environments, enhancing lubricity against bodily tissue.

Pebax® MV 1074 SA 01 MED resin is also an inherently dissipative polymer and can be dry blended or compounded with a polymer matrix to lower the surface resistivity of the final part.

This grade offers the highest quality and it is specially designed to meet the stringent requirements of the medical applications such as minimally invasive devices. Upon request, letters regarding USP Class VI compliance can be provided.

Refractive index according to an internal method is 1.502.

Main applications:

- Breathable membranes
- Permanent antistatic additive
- Surgical tubings and garments

Packaging:

This grade is delivered dried in sealed packaging (25 kg bags) 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			
Tensile Modulus	97 / 80	MPa	ISO 527
Stress at 50% Strain	10 / 10	MPa	ISO 527
Strain at Break	>50 / >50	%	ISO 527
Stress at Break TPE	30 / -	MPa	ISO 527
Strain at Break TPE	>300 / -	%	ISO 527
Shore Hardness D (15s)	38 / -	-	ISO 868

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	158 / *	°C	ISO 11357-1/-3
Glass Transition Temperature (10°C/min)	-40 / *	°C	ISO 11357-1/-2
Oxygen index	19 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Volume Resistivity	1.5E9 / 2.5E7	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 3E9	Ohm	IEC 62631-3-2
Electric Strength	5 / -	kV/mm	IEC 60243-1

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m³	ISO 1183

Film Properties	dry / cond	Unit	Test Standard
ISO Data			
Maximum stress, parallel	32 / *	MPa	ISO 527-3
Maximum stress, normal	34 / *	MPa	ISO 527-3
Maximum strain, parallel	500 / *	%	ISO 527-3
Maximum strain, normal	700 / *	%	ISO 527-3

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65 - 75	°C	-
Pre-drying - Time	4 - 6	h	-
Melt temperature	200 - 270	°C	-

Pebax® MV 1074 SA 01 MED
TPA

ARKEMA

Mold temperature 25 - 60 °C -

Characteristics

Processing

Injection Molding, Other Extrusion

Certifications

Medical, US Pharmacopeia Class VI Approved

Special Characteristics

Anti-static, Light stabilized or stable to light, Heat aging stabilized

Injection Molding

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 200°C / 240°C / 270°C.
- Typical mold temperature: 25–60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 4-6 hours at 65-75°C.

Other Extrusion

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 210°C / 220°C / 230°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 4-6 hours at 65-75°C.