

# PEBAX®

## MV 1074 SP 01

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

**Pebax® MV 1074 SP 01 resin** is an inherently dissipative polymer and can be dry blended or compounded with an isolative polymer to lower the surface resistivity. This hydrophilic grade when extruded into either a thin film or laminated on to a substrate offers excellent permeability to moisture vapor while remaining waterproof.

This SP grade has been developed to be heat and UV resistant.

Refractive index according to an internal method is 1.502.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>MECHANICAL PROPERTIES</b>			
Tensile Modulus	97 / 80	MPa	ISO 527-1/-2
	14100 / 11600	psi	
Stress at 50% Strain	10 / 10	MPa	ISO 527-1/-2
	1450 / 1450	psi	
Strain at Break	>50 / >50	%	ISO 527-1/-2
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Stress at Break TPE	30 / *	MPa	ISO 527-1/-2
	4350 / *	psi	
Shore D Hardness, after 15 s	38 / *	-	ISO 868
Charpy Impact Strength, +23°C	No Break / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	No Break / No Break	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	No Break / -	kJ/m <sup>2</sup>	ISO 179/1eA
Maximum Stress, parallel	32 / *	MPa	ISO 527-3
	4640 / *	psi	
Maximum Stress, normal	34 / *	MPa	ISO 527-3
	4930 / *	psi	
Maximum Strain, parallel	500 / *	%	ISO 527-3
Maximum Strain, normal	700 / *	%	ISO 527-3
<b>THERMAL PROPERTIES</b>			
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
<b>ELECTRICAL PROPERTIES</b>			
Volume Resistivity	1.5E9 / 2.5E7	Ohm* m	IEC 62631-3-1
Surface Resistivity	* / 3E9	Ohm	IEC 62631-3-2
Dielectric (Electric) Strength	5 / -	kV/mm	IEC 60243-1
	127 / -	kV/in	

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 Trade and Companies Register under the number 319 632 790 SDC/11-2018  
 Source: automatically generated TDS from Material Database on 20-02-2024

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### OTHER PROPERTIES

Water Absorption, 23°C, immersion, equilibrium	48 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	1.4 / *	%	ISO 62
Density	1070 / -	kg/m <sup>3</sup>	ISO 1183
	1.07 / -	g/cm <sup>3</sup>	

### MAIN APPLICATIONS:

- Breathable membranes
- Permanent antistatic additive

### PACKAGING:

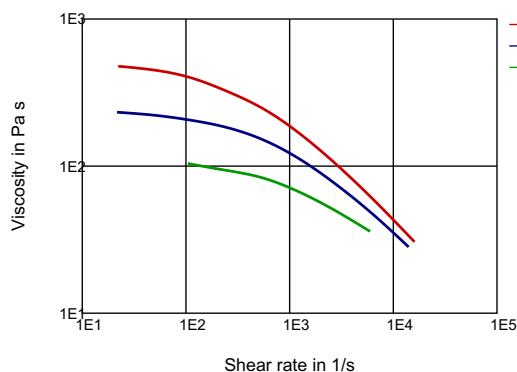
This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

### SHELF LIFE:

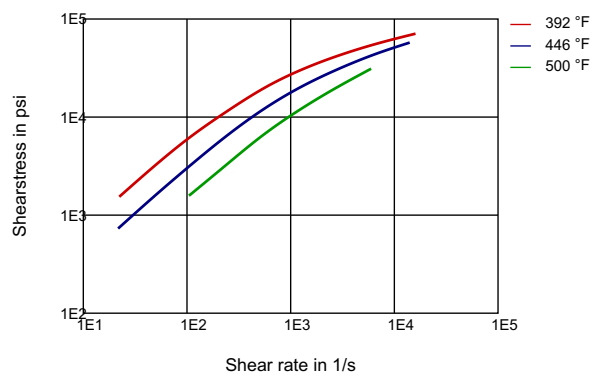
Two years from the delivery. For any use above this limit, please refer to our technical services.

### DIAGRAMS

#### VISCOSITY-SHEAR RATE

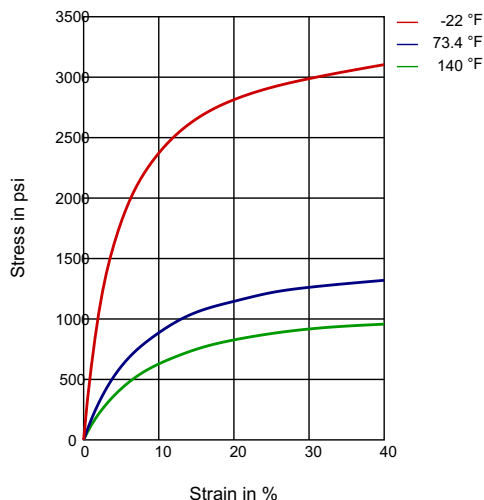


#### SHEARSTRESS-SHEAR RATE

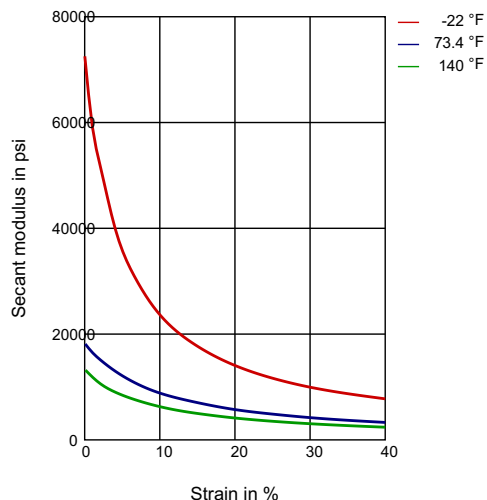


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## STRESS-STRAIN



## SECANT MODULUS-STRAIN



### 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.

### 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.

## PROCESSING

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

## DELIVERY FORM

Pellets

## SPECIAL CHARACTERISTICS

Anti-Static, Heat Stabilized, Light Stabilized

## REGIONAL AVAILABILITY

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

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# PEBAX<sup>®</sup>

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