

PEBAX[®] RNEW[®] 30R51 SA 01

Polyether block **Pebax® Rnew® 30R51 SA 01 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide based on renewable resources.

Pebax® Rnew® 30R51 SA 01 resin is an inherently antistatic polymer and can be dry blended or compounded with a polymer matrix to lower the surface resistivity of the final part. This grade is particularly recommended for PMMA matrices. 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.

The percentage of renewable carbon is 45% (calculated value, based on ASTM D6866).

Refractive index according to an internal method is 1.49.

PROPERTIES	DRY / COND		TEST STANDARD
MECHANICAL PROPERTIES			
Tensile Modulus	- / 59	MPa	ISO 527-1/-2
	- / 8560	psi	
Stress at 50% Strain	- / 7	MPa	ISO 527-1/-2
	- / 1020	psi	
Strain at Break	- / >50	%	ISO 527-1/-2
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Stress at Break TPE	16 / *	MPa	ISO 527-1/-2
	2320 / *	psi	
Shore D Hardness	30 / *	-	ISO 868
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	150 / *	°C	ISO 11357-1/-3
ELECTRICAL PROPERTIES			
Volume Resistivity	1E8 / 1E8	Ohm*m	IEC 60093
Surface Resistivity	* / 1E9	Ohm	IEC 60093
OTHER PROPERTIES			
Water Absorption	72 / *	%	Sim. to ISO 62
Humidity Absorption	2.5 / *	%	Sim. to ISO 62
Density	1010 / -	kg/m³	ISO 1183
	1.01 / -	g/cm³	
%Bio-Based	45	-	ASTM D6866

MAIN APPLICATIONS:

- Permanent antistatic additive for PMMA matrices
- Breathable membranes
- Note: this grade is not recommended by Arkema for usage in medical applications



ARKEMA



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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.

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, Other Extrusion	
DELIVERY FORM	
Pellets	
SPECIAL CHARACTERISTICS	
Anti-Static, Bio-Based, Heat Stabilized	
REGIONAL AVAILABILITY	
North America, Europe, Asia Pacific, South and Central	

