

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 measured** according to ASTM D6866 is 47 %.

Refractive index according to an internal method is 1.49.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Molding Shrinkage, parallel	0.8 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 59 - / 8560	MPa psi	ISO 527-1/-2
Stress at 50% Strain	- / 7 - / 1020	MPa psi	ISO 527-1/-2
Strain at Break	- / >50	%	ISO 527-1/-2
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Stress at Break TPE	16 / * 2320 / *	MPa psi	ISO 527-1/-2
Shore D Hardness, after 15 s	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 62631-3-1
Surface Resistivity	* / 1E9	Ohm	IEC 62631-3-2
OTHER PROPERTIES			
%Bio-Based	47	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	72 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	2.5 / *	%	ISO 62
Density	1010 / - 1.01 / -	kg/m ³ g/cm ³	ISO 1183

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 Source: automatically generated TDS from Material Database on 12-08-2024

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MAIN APPLICATIONS:

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

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.

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	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	
SPECIAL CHARACTERISTICS Anti-Static, Bio-Based, Heat Stabilized	Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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