

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 dissipative 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 according to ASTM D6866 is 41%.

Refractive index according to an internal method is 1.49.

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.

MAIN CHARACTERISTICS

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
MECHANICAL PROPERTIES			
Tensile Modulus	- / 59	MPa	ISO 527-1/-2
Stress at 50% Strain	- / 7	MPa	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 / *	MPa	ISO 527-1/-2
Shore D Hardness, 15s	30 / *	-	ISO 7619-1
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	* / 1E8	Ohm	IEC 60093
OTHER PROPERTIES			
Water Absorption	20 / *	%	Sim. to ISO 62
Humidity Absorption	2.5 / *	%	Sim. to ISO 62
Density	1010 / -	kg/m ³	ISO 1183
POWDER PROPERTIES			
Shore D Hardness, 15s	30 / *	-	ISO 7619-1

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 200°C / 240°C / 270°C.
- Typical mold temperature: 25–60°C.

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- **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

Heat Stabilized, Light stabilized or stable to light

Regional Availability

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

Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

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[pebax.com](https://www.pebax.com)

Arkema Inc. – Technical Polymers

900 First Avenue
King of Prussia, PA 19406
Tel.: +1 610 205 7000
Fax: +1 610 205 7497
[arkema-america.com](https://www.arkema-america.com)

PEBAX®
RNEW
BY ARKEMA

Headquarters: Arkema France

420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
Tel.: +33 1 49 00 80 80
Fax: +33 1 49 00 83 96
[arkema.com](https://www.arkema.com)