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
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, 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 / -	kg/m³	ISO 1183
	1.01 / -	g/cm³	

MAIN APPLICATIONS:

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

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Source: automatically generated TDS from Material Database on 20-02-2024

PEBAX®
RNEW® 30R51 SA 01

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

DELIVERY FORM
Pellets

SPECIAL CHARACTERISTICS
Anti-Static, Bio-Based, Heat Stabilized

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

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