

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.

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 | 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 | 20 / * | % | Sim. to ISO 62 |
| Humidity Absorption | 2.5 / * | % | Sim. to ISO 62 |
| Density | 1010 / - | kg/m ³ | ISO 1183 |
| %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

PACKAGING:

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

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

ARKEMA

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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

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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