Pebax® Rnew® 63R53 SP 01

TPA ARKEMA

Product Texts

Polyether block **Pebax® Rnew® 63R53 SP 01 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide based on renewable resources. This SP grade has been developed to be heat and UV resistant.

The percentage of **renewable carbon measured** according to ASTM D6866 is 77%.

Main applications:

- Ski shoes
- Athletic foot wear components

Packaging:
This grade is delivered dried in sealed packaging (20 and 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.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**- / 245**	MPa	ISO 527
[C] Yield stress	**- / 19**	MPa	ISO 527
[C] Yield strain	**- / 40**	%	ISO 527
[C] Nominal strain at break	**- / >50**	%	ISO 527
[C] Charpy notched impact strength, -30°C	**- / 22**	kJ/m²	ISO 179/1eA
[C] Stress at break TPE	**51 / ***	MPa	ISO 527
[C] Strain at break TPE	**>300 / ***	%	ISO 527
[C] Shore D hardness	**56 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**180 / ***	°C	ISO 11357-1/-3

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**1.5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**0.8 / ***	%	Sim. to ISO 62
[C] Density	**1030 / 1030**	kg/m³	ISO 1183
Biobased content	**77**	%	-

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**65 - 75**	°C	-
Pre-drying - Time	**4 - 8**	h	-
Melt temperature	**230 - 290**	°C	-
Mold temperature	**25 - 60**	°C	-

Characteristics

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

Certifications
Contains renewable resources

Delivery form
Pellets

Special Characteristics
Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

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

Other text information

Injection molding

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 230°C / 260°C / 290°C
- Typical mold temperature : 25 – 60°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 65-75°C

Other extrusion

Processing conditions:

- Typical melt temperature (Min / Recommended / Max): 210°C / 225°C / 240°C
- Drying time and temperature (only necessary for bags opened for more than two hours): 4-8 hours at 65-75°C