

Polyether block amide **Pebax® Rnew 63R53 SA 01** is a thermoplastic elastomer made of flexible polyether and rigid polyamide based on renewable resources.

| Main Characteristics   | Value  | Unit   | Test Method |
|--|--|--|-------------|
| <b>Percentage of Renewable Carbon (calculation)</b>  | <b>77-81</b>   | %  | ASTM 6866   |
| <b>Density</b>   | <b>1.03</b>  | g/cm <sup>3</sup>  | ISO 1183    |
| <b>Water Absorption at Equilibrium</b><br>at 20°C and 50 % RH                                  | <b>0.8</b>   | %  | ISO 62      |
| <b>Water Absorption at Saturation</b><br>24 h in water at 23°C                                 | <b>1.5</b>   | %  |             |
| <b>Melting Point</b>   | <b>180</b>   | °C   | ISO 11357   |
| <b>Vicat Point</b><br>Under 1 daN  | <b>168</b>   | °C   | ISO 306     |
| <b>Hardness Shore (*)</b><br>Instantaneous<br>After 15 s                                       | <b>61</b><br><b>56</b>   | Shore D<br>Shore D   | ISO 868     |
| <b>Tensile Test (*)</b><br>Stress at Break<br>Strain at Break                                  | <b>51</b><br><b>&gt;400</b>  | MPa<br>%   | ISO 527     |
| <b>Flexural Modulus (*)</b>  | <b>243</b>   | MPa  | ISO 178     |
| <b>Charpy Impact</b><br>unnotched 23°C<br>unnotched -30°C<br>V-notched 23°C<br>V-notched -30°C | <b>No break</b><br><b>No break</b><br><b>No break</b><br><b>22<sup>(c)</sup></b> | <b>kJ/m<sup>2</sup></b><br><b>kJ/m<sup>2</sup></b><br><b>kJ/m<sup>2</sup></b><br><b>kJ/m<sup>2</sup></b> | ISO 179     |

(\*) Samples conditioned 15 days at 23°C - 50 % R.H; (c) = Complete Break

| Processing Conditions                                 | Typical Values        |
|---|-----------------------|
| <b>Drying (*):</b> Time / Temperature                 | 4-6 hours / 65-75°C   |
| <b>Injection Temperature:</b> Min / Recommended / Max | 230°C / 260°C / 290°C |
| <b>Extrusion Temperature:</b> Min / Recommended / Max | 210°C / 225°C / 240°C |
| <b>Mold Temperature:</b>                              | 25-60°C               |

(\*) Pebax® is delivered dried in sealed packaging ready to be processed. Drying is only necessary for bags opened for more than 2 hours.

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