

Polyether block amide **Pebax® Rnew 55R53 SP 01** 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.

Main Characteristics	Value	Unit	Test Method
<b>Percentage of Renewable Carbon (calculation)</b>	<b>62-66</b>	%	ASTM 6866
<b>Density</b>	<b>1.03</b>	g/cm <sup>3</sup>	ISO 1183
<b>Melting Point</b>	<b>167</b>	°C	ISO 11357
<b>Vicat Point</b> Under 1 daN	<b>156</b>	°C	ISO 306
<b>Hardness Shore (*)</b> Instantaneous After 15 s	<b>53</b> <b>51</b>	Shore D Shore D	ISO 868
<b>Tensile Test (*)</b> Stress at Break Strain at Break	<b>45</b> <b>&gt;400</b>	MPa %	ISO 527
<b>Flexural Modulus (*)</b>	<b>158</b>	MPa	ISO 178
<b>Charpy Impact</b> unnotched 23°C unnotched -30°C V-notched 23°C V-notched -30°C	<b>No break</b> <b>No break</b> <b>No break</b> <b>No break</b>	kJ/m <sup>2</sup> kJ/m <sup>2</sup> kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 179

(\*) Samples conditioned 15 days at 23°C - 50 % R.H.

Processing Conditions	Typical Values
<b>Drying (*)</b> : Time / Temperature	4-6 hours / 65-75°C
<b>Injection Temperature</b> : Min / Recommended / Max	200°C / 240°C / 270°C
<b>Extrusion Temperature</b> : Min / Recommended / Max	210°C / 220°C / 230°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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