

Polyether block amide **Pebax® Rnew 72R53 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
Percentage of Renewable Carbon (calculation)	93-97	%	ASTM 6866
Density	1.03	g/cm ³	ISO 1183
Water Absorption at Equilibrium At 23°C and 50 % RH	0.8	%	ISO 62
Water Absorption At 23°C and 24 h in water	0.7	%	
Melting Point	186	°C	ISO 11357
Vicat Point Under 1 daN	175	°C	ISO 306
Shrinkage (after 24h, 4 mm, mould at 40°C) // ⊥	1.5 1.3	% %	Internal method
Hardness Shore (*) Instantaneous After 15 s	71 65	Shore D Shore D	
Tensile Test (*) Stress at Break Strain at Break	55 >300	MPa %	ISO 527
Flexural Modulus (*)	560	MPa	
Charpy Impact Unnotched 23°C Unnotched -30°C V-notched 23°C V-notched -30°C	No break No break 46^(c) 16^(c)	kJ/m² kJ/m² kJ/m² kJ/m²	ISO 179

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

Processing Conditions	Typical Values
Drying (*): Time / Temperature	5-7 hours / 70-80°C
Injection Temperature: Min / Recommended / Max Extrusion Temperature: Min / Recommended / Max	230°C / 260°C / 290°C 230°C / 260°C / 290°C
Mold Temperature:	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.

DPT/TDS/56928/August 2009

The information contained in this document is based on trials carried out by our Research Centres and data selected from the literature, but shall in no event be held to constitute or imply any warranty, undertaking, express or implied commitment from our part. Our formal specifications define the limit of our commitment. No liability whatsoever can be accepted by Arkema with regard to the handling, processing or use of the product or products concerned which must in all cases be employed in accordance with all relevant laws and/or regulations in force in the country or countries concerned.