

Polyether block amide **PEBAX® 5533 SA 01** is a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SA grade is specially designed to food uses.

Main Characteristics	Value	Unit	Test Method
<b>Density</b>	<b>1.01</b>	g/cm <sup>3</sup>	ISO 1183
<b>Water Absorption at Equilibrium</b> At 20°C and 50 % RH	<b>0.6</b>	%	ISO 62
<b>Water Absorption</b> At 23°C and 24 h in water	<b>1.2</b>	%	
<b>Melting Point</b>	<b>159</b>	°C	ISO 11357
<b>Vicat Point</b> Under 1 daN	<b>142</b>	°C	ISO 306
<b>Shrinkage (after 24h, 4 mm, mould at 40°C)</b> // ⊥	<b>1.2</b> <b>1.4</b>	% %	Internal method
<b>Hardness Shore (*)</b> Instantaneous After 15 s	<b>54</b> <b>50</b>	Shore D Shore D	
<b>Tensile Test (*)</b> Stress at Break Strain at Break	<b>52</b> <b>&gt;450</b>	MPa %	ASTM D 638
<b>Flexural Modulus (*)</b>	<b>170</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>	<b>kJ/m<sup>2</sup></b> <b>kJ/m<sup>2</sup></b> <b>kJ/m<sup>2</sup></b> <b>kJ/m<sup>2</sup></b>	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.

DPT/TDS/10225 & 11244/April 2010

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. We point out that it is the duty of the end user to check, in accordance with professional practice, the reciprocal compatibility of the material and the packaged foodstuffs (respective of Overall and Specific Migration Limits) and also that organoleptic characteristics of the latter remain constant. Due to the evolution of regulations or existing specific restrictions, it is necessary before any usage in food contact to request the related certificates from our commercial representatives.