



## Material data sheet      PU hardness 93 Sh A green

### Thermoplastic polyurethane for high temperature applications (TPU)

Resistant to: oil, ozone, microbes

<i>Properties</i>	<i>Condition</i>	<i>Standard</i>	<i>Unit</i>			
<b>Colour</b>				<b>green</b>		
<b>Hardness</b>	<b>23°C</b>	<b>ISO 868</b>	<b>Shore A</b>	<b>93+/-2</b>	<b>Shore A</b>	<b>93+/-2</b>
<b>Hardness</b>	<b>23°C</b>	<b>ISO 868</b>	<b>Shore D</b>	<b>47+/-3</b>	<b>Shore D</b>	<b>47+/-3</b>
<b>Modulus 100%</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>N/mm<sup>2</sup></b>	<b>13</b>	<b>Psi</b>	<b>1880</b>
<b>Modulus 300%</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>N/mm</b>	<b>23</b>	<b>Psi</b>	<b>3330</b>
<b>Tensile strength</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>N/mm</b>	<b>50</b>	<b>Psi</b>	<b>7250</b>
<b>Elongation at break</b>	<b>23°C</b>	<b>DIN 53 504</b>	<b>%</b>	<b>500</b>	<b>%</b>	<b>500</b>
<b>Tear strength</b>	<b>23°C</b>	<b>DIN ISO 34-1 Methode B</b>	<b>kN/m</b>	<b>100</b>	<b>Lbf/inch</b>	<b>570</b>
<b>Spec. Gravity</b>	<b>23°C</b>	<b>ISO 1183</b>	<b>Kg/m<sup>3</sup></b>	<b>1200</b>	<b>g/cm<sup>3</sup></b>	<b>1,2</b>
<b>Abrasion</b>	<b>23°C</b>	<b>DIN 53 516</b>	<b>mm<sup>3</sup></b>	<b>35</b>	<b>mm<sup>3</sup></b>	<b>35</b>
<b>Compression set</b>	<b>*</b>	<b>ISO 815</b>	<b>%</b>	<b>25</b>	<b>%</b>	<b>25</b>
<b>Compression set</b>	<b>**</b>	<b>ISO 815</b>	<b>%</b>	<b>30</b>	<b>%</b>	<b>30</b>
<b>Minimum service temperature</b>			<b>°C</b>	<b>-30</b>	<b>°F</b>	<b>-34</b>
<b>Maximum service temperature</b>			<b>°C</b>	<b>110</b>	<b>°F</b>	<b>230</b>
<b>*24h 70°C 25% deflection</b>				<b>**24h 100°C 25% deflection</b>		

All above stated data results from random tests which were taken from the ongoing production. All data was established based on standard test-products according to ISO, DIN and ASTM standards and can basically not be carried over to the completed seal.

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