## **General product information**



# Elastollan® 1180 A U

® = registered trademark of BASF Polyurethanes GmbH

#### **Characteristic:**

Thermoplastic Polyether-Polyurethane with outstanding hydrolysis resistance, low temperature flexibility and high resistance to micro-organisms, UV-stabilized. Processable by injection moulding and extrusion.

Property	Unit	Value	Test method according to
Hardness	Shore A	80	DIN ISO 7619-1
Density	g/cm³	1,11	DIN EN ISO 1183-1-A
Tensile strength	MPa	45	DIN 53504-S2 / ISO 37
Elongation at break	%	600	DIN 53504-S2 / ISO 37
Stress at 20 % elongation	MPa	2	DIN 53504-S2 / ISO 37
Stress at 100 % elongation	MPa	4,5	DIN 53504-S2 / ISO 37
Stress at 300 % elongation	MPa	8	DIN 53504-S2 / ISO 37
Tear strength	N/mm	55	DIN ISO 34-1Bb
Abrasion loss	mm³	30	DIN ISO 4649-A
Compression set 23°C / 72 hrs	%	25	DIN ISO 815
Compression set 70°C / 24 hrs	%	45	DIN ISO 815
Tensile strength after storage in water at 80°C for 42 days	MPa	30	DIN 53504-S2 / ISO 37
Elongation at break after storage in water at 80°C for 42 days	%	700	DIN 53504-S2 / ISO 37
Notched impact strength (Charpy) + 23°C - 30°C	kJ/m² kJ/m²	no break no break	DIN EN ISO 179-1

Test plaques are manufactured by injection moulding from pre-dried granules (water content of ≤0,02%). Test plaques are aged 20 hrs at 100°C. Specimens are cut from test plaques. Test conditions: 23°C  $\pm$  2°C and 50%  $\pm$  6% rel. humidity.

These are general guidance data. No statement regarding specific properties. All supplies are subject to detailed specifications to be agreed-up in each individual case and containing, among others, the tolerances to be specified therein.

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### Storage and handling:

Elastollan ® is hygroscopic, therefore storage in dry conditions and original container is recommended. Additional information about drying, processing temperatures and post-treatment are given in our product brochure "Thermoplastic Polyurethane Elastomers (TPU) Elastollan®- Processing Recommendations".

### **Chemical Characteristics:**

Polymer based on: polyurethane, stabilizing agents and additives

#### **Delivery form and packing:**

Lentil shaped pellets Packaging dependent upon grade and agreement.

#### **Processing:**

Processable at least for 6 months from delivery date in original sealed containers with cool dry storage.

#### Hazard indication:

No particular hazards known.

Please have a look at the Material Safety Data Sheet before handling.

#### **Waste Disposal:**

More detailed information is provided in our country-specific pamphlet and the Material Safety Data Sheet.

#### Important Information:

There are national and international laws and regulations to consider if it is intended to produce consumer articles (e.g. articles that necessitate food or skin contact, toys etc.) or medical objects from BASF Polyurethanes GmbH products. Where specific regulations do not exist, the current legal requirements of the European Union for consumer articles as well as medical products should be used as reference. Consultation with the BASF Polyurethanes GmbH Sales Office and our Ecology and Product Safety Department is strongly recommended.

The data contained in this document as well as advice or other support services are based on our current knowledge and experience. In view of many factors that may affect processing and application of our products, this data does not relieve processors from carrying out their own investigations and tests, particularly with regards to the suitability of the goods supplied for the processes and purposes they intend to use them for; neither does this data imply any guarantee of certain properties, or the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, measured values etc. given herein may change without prior notice and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.