

Elastollan® 1180 A

Thermoplastic Polyurethane Elastomer (Polyether)

BASF Polyurethanes GmbH

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Thermoplastic Polyether Polyurethane Elastomers with outstanding hydrolysis resistance, low temperature flexibility and resistance to micro-organisms.

Typical applications

Cable jackets, plugs and terminations, spiral tubing, Films, ski-boot shells, ear tags, technical mouldings like mining screens, railway pads, seals.

General

Material Status	• Commercial: Active
Literature ¹	• Processing - Elastollan (English) • Technical Datasheet (English)
UL Yellow Card ²	• E140250-222868
Search for UL Yellow Card	• BASF Polyurethanes GmbH • Elastollan®
Availability	• Europe
Features	• Hydrolysis Resistant • Low Temperature Flexibility • Microbe Resistant
Uses	• Cable Jacketing • Film • Mining Applications • Molded Ear Tags • Plugs • Seals • Sporting Goods • Tubing
Processing Method	• Blow Molding • Extrusion • Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.11 g/cm ³	ISO 1183/A

Mechanical	Nominal Value Unit	Test Method
Abrasion Loss	30.0 mm ³	ISO 4649-A

Elastomers	Nominal Value Unit	Test Method
Tensile Stress		DIN 53504
20% Strain	2.00 MPa	
100% Strain	4.50 MPa	
300% Strain	8.00 MPa	
Tensile Stress		DIN 53504
Yield	45.0 MPa	
Yield ⁴	30.0 MPa	
Tensile Elongation		DIN 53504
Break	650 %	
Break ⁴	700 %	
Tear Strength ⁵	55.0 kN/m	ISO 34-1
Compression Set		ISO 815
23°C, 72 hr	25 %	
70°C, 24 hr	45 %	

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179
-30°C	No Break	
23°C	No Break	

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore A, 3 sec)	80	ISO 7619

Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94

Injection	Nominal Value Unit
Processing (Melt) Temp	170 to 240 °C
Mold Temperature	20 to 70 °C



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Extrusion

Nominal Value Unit

Melt Temperature

160 to 220 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ after storage in water at 80°C for 42 days

⁵ Method Bb, Angle (Nicked)



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Where to Buy

Supplier

BASF Polyurethanes GmbH

, Germany

Telephone: +49-5443-12-0

Web: <http://www.polyurethanes.basf.eu/pu/solutions/en/>

Distributor

Biesterfeld

Biesterfeld is a Pan European distribution company. Contact Biesterfeld for availability of individual products by country.

Telephone: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

Availability: Algeria, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

Distrupol Ltd

Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.

Telephone: 08452003040

Web: <http://www.distrupol.com/>

Availability: Denmark, Finland, Ireland, Norway, Sweden, United Kingdom

