

Elastollan® 1154 D

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	• E140250-100196786
Search for UL Yellow Card	• BASF Polyurethanes GmbH • Elastollan®
Availability	• Europe
Features	• Hydrolysis Resistant • Low Temperature Flexibility • Microbe Resistant
Uses	• Cable Jacketing • Molded Ear Tags • Sporting Goods • Film • Plugs • Tubing • Mining Applications • Seals
Processing Method	• Blow Molding • Extrusion • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.17 g/cm ³	1.17 g/cm ³	ISO 1183/A

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	21800 psi	150 MPa	ISO 527-2
Abrasion Loss	20.0 mm ³	20.0 mm ³	ISO 4649-A

Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			DIN 53504
20% Strain	1600 psi	11.0 MPa	
100% Strain	2470 psi	17.0 MPa	
300% Strain	5510 psi	38.0 MPa	
Tensile Stress			DIN 53504
Yield ⁴	5080 psi	35.0 MPa	
Yield	7250 psi	50.0 MPa	
Tensile Elongation ⁴ (Break)	450 %	450 %	DIN 53504
Tear Strength ⁵	860 lbf/in	150 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	40 %	40 %	
158°F (70°C), 24 hr	50 %	50 %	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	8.6 ft·lb/in ²	18 kJ/m ²	
73°F (23°C)	No Break	No Break	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, 3 sec)	53	53	ISO 7619

Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	338 to 464 °F	170 to 240 °C
Mold Temperature	68.0 to 158 °F	20.0 to 70.0 °C

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	320 to 428 °F	160 to 220 °C



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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 Plastic GmbH

Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH 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

ESSE International - OMYA

ESSE International - OMYA is a Pan European distribution company. Contact ESSE International - OMYA for availability of individual products by country.

Telephone: +33-1-30-80-56-56

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

Availability: Europe, Turkey

