Technical Data

Product Description

Thermoplastic Polyether Polyurethane Elastomers with outstanding hydrolysis resistance, low temperature flexibility and resistance to microorganisms.

Typical applications

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

General			
Material Status	Commercial: Active		
Literature ¹	 Processing - Elastollan (English) Technical Datasheet (English) 		
UL Yellow Card ²	• E140250-222870		
Search for UL Yellow Card	BASF Polyurethanes GmbH Elastollan®		
Availability	 Europe 		
Features	 Hydrolysis Resistant 	 Low Temperature Flexibility 	 Microbe Resistant
Uses	Cable JacketingFilmMining Applications	Molded Ear TagsPlugsSeals	 Sporting Goods Tubing
Processing Method	Blow Molding	Extrusion	 Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.12 g/cm ³	ISO 1183/A
Mechanical	Nominal Value Unit	Test Method
Abrasion Loss	25.0 mm ³	ISO 4649-A
Elastomers	Nominal Value Unit	Test Method
Tensile Stress		DIN 53504
20% Strain	2.50 MPa	
100% Strain	6.00 MPa	
300% Strain	10.0 MPa	
Tensile Stress		DIN 53504
Yield	45.0 MPa	
Yield ⁴	32.0 MPa	
Tensile Elongation (Break)	600 %	DIN 53504
Tear Strength ⁵	70.0 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		ISO 7619
Shore A, 3 sec	87	
Shore D, 3 sec	36	
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	

1 of 3

UL LLC ©2023. All rights reserved. UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com. Form No. TDS-83945-en Document Created: Wednesday, August 2, 2023 Added to Prospector: April 2005 Last Updated: 1/28/2014

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content. Thermoplastic Polyurethane Elastomer (Polyether) BASF Polyurethanes GmbH



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)



2 of 3

UL LLC ©2023. All rights reserved. UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content. Form No. TDS-83945-en Document Created: Wednesday, August 2, 2023 Added to Prospector: April 2005 Last Updated: 1/28/2014



Where to Buy

Supplier

BASF Polyurethanes GmbH , Germany Telephone: +49-5443-12-0 Web: http://www.polyurethanes.basf.eu/pu/solutions/en/

Distributor

Channel Prime Alliance Telephone: 800-247-8038 Web: http://www.channelpa.com/ Availability: North America

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



UL LLC ©2023. All rights reserved. UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content. Form No. TDS-83945-en Document Created: Wednesday, August 2, 2023 Added to Prospector: April 2005 Last Updated: 1/28/2014