

Elastollan® 1180 A

Thermoplastic Polyurethane Elastomer (Polyether)

BASF Polyurethanes GmbH

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

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/cm³	ISO 1183/A
Mechanical	Nominal Value Unit	Test Method
Abrasion Loss	30.0 mm³	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

