

Technical Data

Product Description

Extrusion- and injection molding grade; with special UV stabilizers; very good hydrolysis and microbial resistance; good low-temperature flexibility; free from plasticizers; high moisture vapor transmission rate; Application; breathable films; Films; Sports shoe soles; hard - soft systems

General

Material Status	• Experimental: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a> • <a href="#">Technical Datasheet (German)</a>		
UL Yellow Card <sup>2</sup>	• <a href="#">E465093-101727508</a>		
Search for UL Yellow Card	• <a href="#">Bayer MaterialScience AG - PUR</a> • <a href="#">Desmopan®</a>		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Additive	• UV Stabilizer		
Features	• High Moisture Vapor Transmission • Hydrolysis Resistant	• Low Temperature Flexibility • Microbe Resistant	
Uses	• Film	• Footwear	• Sporting Goods
RoHS Compliance	• RoHS Compliant		
Processing Method	• Extrusion	• Injection Molding	

Physical	Nominal Value Unit	Test Method
Density	1060 kg/m <sup>3</sup>	ISO 1183 <sup>4</sup>

Mechanical	Nominal Value Unit	Test Method
Tensile Stress <sup>5</sup>		DIN 53504
Break, 23°C	26.8 MPa	
100% Strain, 23°C	2.90 MPa	
300% Strain, 23°C	5.50 MPa	
Tensile Strain <sup>5</sup> (Break, 23°C)	790 %	DIN 53504
Abrasion Resistance (23°C)	69.0 mm <sup>3</sup>	ISO 4649
Tensile Storage Modulus		ISO 6721-1,-4
-20°C	125 MPa	
20°C	11.0 MPa	
60°C	9.00 MPa	

Elastomers	Nominal Value Unit	Test Method
Tear Strength <sup>6</sup> (23°C)	39 kN/m	ISO 34-1
Compression Set		ISO 815
23°C, 72 hr	22 %	
70°C, 24 hr	49 %	

Impact	Nominal Value Unit	Test Method
Impact Resilience (23°C)	63 %	ISO 4662

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore A, 3 sec)	70	ISO 868 <sup>4</sup>

Injection	Nominal Value Unit
Drying Temperature	< 80.0 °C
Processing (Melt) Temp	190 to 210 °C
Mold Temperature	20.0 to 40.0 °C

Extrusion	Nominal Value Unit
Drying Temperature	< 80.0 °C
Melt Temperature	175 to 210 °C



**Notes**

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

<sup>5</sup> 200 mm/min

<sup>6</sup> 500 mm/min



## Desmopan® DP 9370AU

Thermoplastic Polyurethane Elastomer (Polyether)

**Bayer MaterialScience AG - PUR**

# PROSPECTOR®

[www.ulprospector.com](http://www.ulprospector.com)

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### Where to Buy

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#### Supplier

**Bayer MaterialScience AG - PUR**

Leverkusen, Germany

**Telephone:** +49-214-30-1

**Web:** <http://www.bayermaterialscience.de/>

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#### Distributor

Please contact the supplier to find a distributor for Desmopan® DP 9370AU

