

# DURAFLEX TPU 90A LM BK

Thermoplastic Polyurethane Elastomer

Conventus Polymers LLC

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## Technical Data

### Product Description

DURAFLEX TPU 90A LM BK is a 90 shore A hardness TPU. It features a low compression set and 4% laser marking masterbatch. It is available in black. This grade is available in AMR, EUR, and APAC.

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>
Search for UL Yellow Card	• <a href="#">Conventus Polymers LLC</a>
Availability	• Asia Pacific • Europe • North America
Features	• Laser Markable • Low Compression Set
Uses	• Masterbatch
Appearance	• Black

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.14 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>3</sup>	22 g/10 min	ASTM D1238
Molding Shrinkage		ASTM D955
Flow : 1.60 mm	0.65 to 0.75 %	
Across Flow : 1.60 mm	6.5E-3 to 7.5E-3 %	

Mechanical	Nominal Value Unit	Test Method
Flexural Modulus	77.9 MPa	ASTM D790
Taber Abrasion Resistance	10.3 m-g	ASTM D1044

Elastomers	Nominal Value Unit	Test Method
Tensile Stress (100% Strain)	11.5 MPa	ASTM D412
Tensile Strength (Break)	46.2 MPa	ASTM D412
Tensile Elongation (Break)	470 %	ASTM D412
Tear Strength	137 kN/m	ASTM D624
Compression Set (25°C, 22 hr)	24 %	ASTM D395B

Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore A)	90	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Glass Transition Temperature	-24.4 °C	DSC
Vicat Softening Temperature	111 °C	ASTM D1525
CLTE - Flow	1.5E-4 cm/cm/°C	ASTM D696

Injection	Nominal Value Unit
Drying Temperature	88 to 104 °C
Processing (Melt) Temp	204 to 221 °C
Mold Temperature	16 to 60 °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> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 374°F / 19.2 lb



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### Where to Buy

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#### Supplier

##### **Conventus Polymers LLC**

Parsippany, Parsippany USA

**Telephone:** 973-343-7669

**Web:** <http://www.conventuspolymers.com/>

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#### Distributor

##### **Conventus Polymers**

**Telephone:** 973-343-7669

**Web:** <http://www.conventuspolymers.com/>

**Availability:** North America

