

Technical Data Sheet

**Duragrip DGR 6070BK**

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

Product Description

DuraGrip® 6070BK is a general-purpose Thermoplastic Elastomer (TPE) designed for injection molding processes. It has a high coefficient of friction, low melt viscosity and bonds well to polypropylene. DuraGrip® 6070BK is not hygroscopic and under normal conditions does not require drying.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• General Purpose • Good Adhesion	• High Friction • Low Viscosity	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	0.987	0.985 g/cm ³	ASTM D792
--	0.983 g/cm ³	0.983 g/cm ³	ISO 1183
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ASTM D412 ISO 37
100% Strain	380 psi	2.62 MPa	
300% Strain	497 psi	3.43 MPa	
Tensile Strength (Yield)	1210 psi	8.34 MPa	ASTM D412 ISO 37
Tensile Elongation (Break)	640 %	640 %	ASTM D412 ISO 37
Tear Strength ¹	163 lbf/in	28.5 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 5 sec)	72	72	ASTM D2240 ISO 868
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (374°F (190°C), 294 sec ⁻¹)	130 Pa·s	130 Pa·s	ASTM D3835

Additional Information

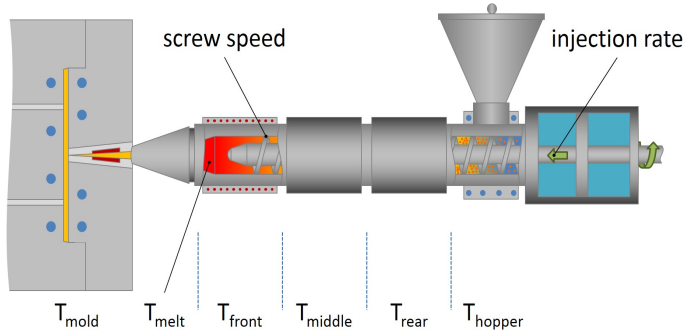
The value listed as Density -Specific Gravity, ASTM D792, was tested in accordance with ASTM D471.
The value listed as Density, ISO 1183, was tested in accordance with ISO 2781.

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Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	370 to 390 °F	188 to 199 °C
Middle Temperature	390 to 410 °F	199 to 210 °C
Front Temperature	420 to 440 °F	216 to 227 °C
Nozzle Temperature	400 to 430 °F	204 to 221 °C
Processing (Melt) Temp	390 to 430 °F	199 to 221 °C
Mold Temperature	110 to 130 °F	43 to 54 °C
Injection Pressure	150 to 600 psi	1.03 to 4.14 MPa
Screw Speed	25 to 100 rpm	25 to 100 rpm

Injection Notes

Injection Speed: 1 to 3 in³/sec
Injection Time (1st Stage/Boost): 0.5 to 4 sec
Second Stage Pressure: 150 to 300 psi
Second Stage Time: 3 to 10 sec
Cooling Time: 10 to 20 sec
Back Pressure: 20 to 75 %

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Notes

¹ Die C

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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