

Technical Data Sheet

**Duragrip DGR 6160NC**

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

Product Description

DuraGrip® DGR 6160 is offered in an NC (colorable) version, and is designed to chemically bond to a wide variety of thermoplastic substrates including ABS, PC, Nylon 6, Nylon 6/6, glass filled Nylon, ASA, PC/ABS alloys, PBT, and PC/PBT alloys. It is easy to use in injection molding and extrusion processes. DGR 6160NC has excellent elastomeric properties and soft touch feel. DuraGrip® bonding grades are hygroscopic, and for best results drying is recommended prior to use.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Good Adhesion		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.09	1.09 g/cm ³	ASTM D792
--	1.09 g/cm ³	1.09 g/cm ³	ISO 1183
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (100% Strain)	333 psi	2.30 MPa	ASTM D412 ISO 37
Tensile Strength (Yield)	2060 psi	14.2 MPa	ASTM D412 ISO 37
Tensile Elongation (Break)	550 %	550 %	ASTM D412 ISO 37
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 5 sec)	65	65	ASTM D2240 ISO 868
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (374°F (190°C), 200 sec ⁻¹)	354 Pa·s	354 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	400 to 430 °F	204 to 221 °C
Middle Temperature	420 to 440 °F	216 to 227 °C
Front Temperature	440 to 460 °F	227 to 238 °C
Nozzle Temperature	440 to 480 °F	227 to 249 °C
Processing (Melt) Temp	440 to 490 °F	227 to 254 °C
Mold Temperature	110 to 130 °F	43 to 54 °C
Injection Pressure	400 to 800 psi	2.76 to 5.52 MPa
Screw Speed	50 to 150 rpm	50 to 150 rpm

Injection Notes

Injection Speed: 1 to 3 in³/sec
Injection Time (1st Stage/Boost): 0.5 to 4 sec
Second Stage Pressure: 300 to 500 psi
Second Stage Time: 3 to 10 sec
Cooling Time: 10 to 25 sec
Back Pressure: 25 to 75 %

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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