**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

| | | |
|---|---|---|
| Features | • Good Adhesion | |
| Agency Ratings | • EU 2002/96/EC (WEEE) | |
| RoHS Compliance | • RoHS Compliant | |
| Forms | • Pellets | |
| Processing Method | • Extrusion | • Injection Molding |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density / Specific Gravity | | | |
| -- | 1.09 | 1.09 g/cm³ | ASTM D792 |
| -- | 1.09 g/cm³ | 1.09 g/cm³ | ISO 1183 |
| **Elastomers** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Stress (100% Strain) | 333 psi | 2.30 MPa | ASTM D412<br>ISO 37 |
| Tensile Strength (Yield) | 2060 psi | 14.2 MPa | ASTM D412<br>ISO 37 |
| Tensile Elongation (Break) | 550 % | 550 % | ASTM D412<br>ISO 37 |
| **Hardness** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Durometer Hardness (Shore A, 5 Sec) | 65 | 65 | ASTM D2240<br>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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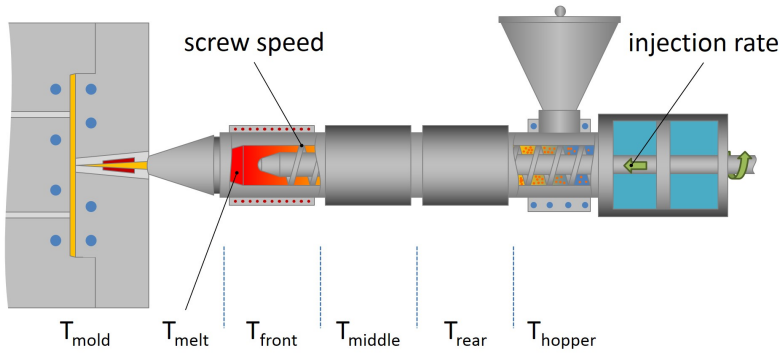


| Injection | Nominal Value (English) | Nominal Value (SI) |
|---|---|---|
| Rear Temperature | 400 to 430 °F | 204 to 221 °C |
| Middle Temperature | 420 to 440 °F | 216 to 227 °C |
| Front Temperature | 440 to 460 °F | 227 to 238 °C |
| Nozzle Temperature | 440 to 480 °F | 227 to 249 °C |
| Processing (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.