

Technical Data Sheet

Duragrip DGR 6170NC

Thermoplastic Elastomer

LyondellBasell Industries

Engineering Plastics

Product Description

DuraGrip® DGR 6170 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 6170NC 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			
--	1.11	1.11 g/cm³	ASTM D792
--	1.11 g/cm³	1.11 g/cm³	ISO 1183
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (100% Strain)	347 psi	2.39 MPa	ASTM D412 ISO 37
Tensile Strength (Yield)	2150 psi	14.8 MPa	ASTM D412 ISO 37
Tensile Elongation (Break)	530 %	530 %	ASTM D412 ISO 37
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 5 Sec)	69	69	ASTM D2240 ISO 868
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (374°F (190°C), 200 Sec ⁻¹)	373 Pa·s	373 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.