Technical Data Sheet

Duragrip DGR 7800

Thermoplastic Elastomer
LyondellBasell Industries
Engineering Plastics

Product Description

DuraGrip® DGR 7800 is a specialty grade Thermoplastic Elastomers (TPE) that is formulated with FDA compliant raw materials and is easy to use in the injection molding and extrusion process. DGR 7800 has an excellent soft touch feel and will bond to olefinics.

General

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	0.982	0.980 g/cm³	ASTM D471
--	0.892 g/cm³	0.892 g/cm³	ISO 1183
Elastomers	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	343 psi	2.36 MPa	ASTM D412 ISO 37
Tensile Strength (Yield)	1040 psi	7.18 MPa	ASTM D412 ISO 37
Tensile Elongation (Break)	690 %	690 %	ASTM D412 ISO 37
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 5 Sec)	59	59	ASTM D2240 ISO 868
Fill Analysis	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Melt Viscosity (374°f (190°c), 300 Sec^-1)	120 Pa·s	120 Pa·s	ASTM D3835

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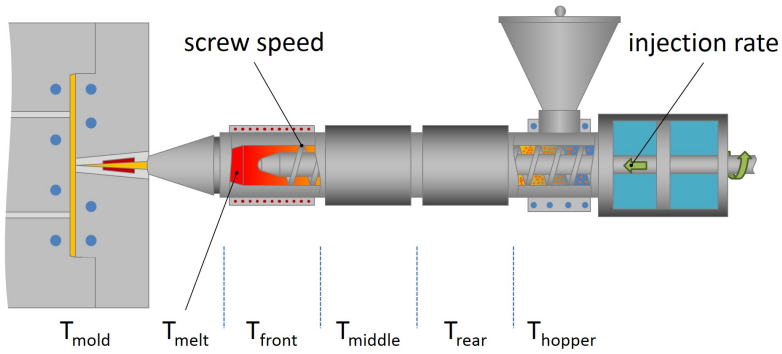

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	150 °F	66 °C
Drying Time	3.0 hr	3.0 hr
Rear Temperature	370 to 390 °F	188 to 199 °C
Middle Temperature	390 to 410 °F	199 to 210 °C
Front Temperature	420 to 440 °F	216 to 227 °C
Nozzle Temperature	400 to 430 °F	204 to 221 °C
Processing (Melt) Temp	390 to 430 °F	199 to 221 °C
Mold Temperature	110 to 130 °F	43 to 54 °C
Injection Pressure	150 to 500 psi	1.03 to 3.45 MPa
Screw Speed	25 to 100 rpm	25 to 100 rpm

Injection Notes

Injection Speed: 1 to 3 cu. in. /sec.
Injection Time (boost: 0.5 to 2 sec.
Second Stage Pressure: 150 to 300 psi
Second Stage Time: 3 to10 sec.
Cooling Time: 10 to 20 sec.
Back Pressure: 20 to 50%

Notes

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