

DuraGrip DGR-6040BKBLK

LyondellBasell Industries - Thermoplastic Elastomer

General Information

Product Description

DuraGrip 6040BK 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 6040BK is not hygroscopic and under normal conditions does not require drying.

General

Features	• Good Adhesion	• High Friction	• Low Viscosity
Uses	• General Purpose		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.980	g/cm ³	ASTM D471
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	609	psi	ASTM D412
Tensile Elongation (Break)	780	%	ASTM D412
Tear Strength ²	120	lbf/in	ASTM D624
Compression Set			ASTM D395B
75°F, 22 hr	14	%	
158°F, 22 hr	36	%	
212°F, 22 hr	59	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	38		ASTM D2240
Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity (374°F, 294 sec ⁻¹)	140	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	151	°F
Drying Time - Desiccant Dryer	3.0	hr
Rear Temperature	370 to 390	°F
Middle Temperature	390 to 410	°F
Front Temperature	421 to 441	°F
Nozzle Temperature	399 to 430	°F
Processing (Melt) Temp	390 to 430	°F
Mold Temperature	109 to 129	°F
Injection Pressure	149 to 600	psi
Screw Speed	25 to 100	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C