

Technical Data Sheet

DuraGrip DGR-6040BKBLK



Thermoplastic Elastomer

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.

Processing Method	Injection Molding
Attribute	Good Adhesion; High Friction; Low Viscosity
Forms	Pellets
Appearance	Black
Application	General Purpose

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density - Specific Gravity	0.98	g/cm ³	ASTM D471
Melt Viscosity, (190 °C, 294 sec ⁻¹)	140	Pa·s	ASTM D3835
Mechanical			
Tensile Strength at Yield	4.2	MPa	ASTM D412
Tensile Elongation at Break	780	%	ASTM D412
Tear Strength, (Die C)	21	kN/m	ASTM D624
Hardness			
Durometer Hardness, (Shore A, 5 sec)	38		ASTM D2240
Additional Information			
Compression Set			
(24 °C, 22 hr, Method B)	14	%	ASTM D395
(70 °C, 22 hr, Method B)	36	%	ASTM D395
(100 °C, 22.0 hr, Method B)	59	%	ASTM D395

Injection Parameters	Nominal Value	Units
Drying Time, (Desiccant Dryer)	3	hr
Drying Temperature	66	°C
Nozzle Temperature	204 to 221	°C
Screw Speed	25 to 100	rpm
Processing (Melt) Temp	199 to 221	°C
Front Temperature	216 to 227	°C
Middle Temperature	199 to 210	°C
Rear Temperature	188 to 199	°C
Mold Temperature	43 to 54	°C
Injection Pressure	1.03 to 4.14	MPa