

Technical Data Sheet

DuraGrip DGR-7800NAT



Thermoplastic Elastomer

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.

Processing Method	Extrusion; Injection Molding
Attribute	Good Adhesion; Soft
Forms	Pellets
Appearance	Translucent

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density	0.892	g/cm ³	ISO 1183
Density - Specific Gravity	0.980	g/cm ³	ASTM D471
Melt Viscosity, (190 °C, 300 sec ⁻¹)	120	Pa·s	ASTM D3835
Mechanical			
Tensile Stress at 100%	2.36	MPa	ASTM D412
Tensile Strength at Yield	7.18	MPa	ASTM D412
Tensile Stress at Yield	7.18	MPa	ISO 37
Tensile Strain at Break	690	%	ISO 37
Tensile Elongation at Break	690	%	ASTM D412
Hardness			
Shore Hardness, (Shore A, 5 sec)	59		ISO 868
Durometer Hardness, (Shore A, 5 sec)	59		ASTM D2240

Injection Parameters	Nominal Value	Units
Drying Time	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 3.45	MPa