



Wednesday, August 30, 2023

PRL ABS-G20

Polymer Resources Ltd. - Acrylonitrile Butadiene Styrene

Units

English ▼

Action	Legend (Open)
 	

General Information

General	
Material Status	Commercial: Active
Availability	North America
Filler / Reinforcement	Glass Fiber, 20% Filler by Weight
RoHS Compliance	RoHS Compliant
Forms	Pellets
Processing Method	Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	0.10 to 5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.125 in)	650000	psi	ASTM D638
Tensile Strength (Yield, 0.125 in)	10000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	10000	psi	ASTM D638
Tensile Elongation (Yield, 0.125 in)	2.0	%	ASTM D638
Flexural Modulus (0.125 in)	750000	psi	ASTM D790
Flexural Strength (0.125 in)	15500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	5.0	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	225	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	213	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175 to 185	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	375 to 390	°F
Middle Temperature	410 to 430	°F
Front Temperature	410 to 440	°F
Processing (Melt) Temp	410 to 460	°F
Mold Temperature	120 to 140	°F

Notes

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

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