Polymer Resources
Classic® Engineering Plastic Compounds

Wednesday, August 30, 2023

PRL ABS-G30

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, 30% 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	1.26		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 2.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (0.125 in)	1.30E+6	psi	ASTM D638
Tensile Strength (Yield, 0.125 in)	14000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	14000	psi	ASTM D638
Tensile Elongation (Yield, 0.125 in)	1.5	%	ASTM D638
Flexural Modulus (0.125 in)	1.20E+6	psi	ASTM D790
Flexural Strength (0.125 in)	19500	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)	235	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	225	°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.