

**PRL ABS-GP-IM**Units **Polymer Resources Ltd. - Acrylonitrile Butadiene Styrene****Action****Legend (Open)****General Information****General**

Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Impact Modifier</li> </ul>
Features	<ul style="list-style-type: none"> <li>General Purpose</li> <li>Impact Modified</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>

**ASTM & ISO Properties <sup>1</sup>**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Physical			
Density / Specific Gravity	1.02		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.0 to 7.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical			
Tensile Modulus (0.125 in)	280000	psi	ASTM D638
Tensile Strength (Yield, 0.125 in)	5500	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	4400	psi	ASTM D638
Tensile Elongation (Yield, 0.125 in)	2.0	%	ASTM D638
Tensile Elongation (Break, 0.125 in)	25	%	ASTM D638
Flexural Modulus (0.125 in)	274000	psi	ASTM D790
Flexural Strength (0.125 in)	8510	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	5.0	ft-lb/in	ASTM D256
Notched Izod Impact Strength			ISO 180/1A
-22°F	4.3	ft-lb/in <sup>2</sup>	
73°F	13	ft-lb/in <sup>2</sup>	
Gardner Impact (0.125 in)	250	in-lb	ASTM D3029
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	190	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	180	°F	ASTM D648
Vicat Softening Temperature	210	°F	ASTM D1525 <sup>2</sup>

**Processing Information**

	<b>Nominal Value</b>	<b>Unit</b>
Injection		
Drying Temperature	180 to 200	°F
Drying Time	2.0 to 5.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	380 to 410	°F
Middle Temperature	420 to 460	°F
Front Temperature	440 to 490	°F
Processing (Melt) Temp	450 to 525	°F
Mold Temperature	120 to 180	°F

**Notes**<sup>1</sup> Typical properties: these are not to be construed as specifications.<sup>2</sup> Rate B (120°C/h), Loading 2 (50 N)

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