

**General Information**

**Product Description**

Polyether  
 Taber Abrasion H-18 Wheel, 1000-g Load, 1000 Cycles (mg Loss): 25  
 Bayshore Resilience (%): 40

**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>
Test Standards Available	<ul style="list-style-type: none"> <li>ASTM</li> <li>ISO 10350</li> </ul>
Features	<ul style="list-style-type: none"> <li>Abrasion Resistance, Good</li> <li>Bacteria Resistant</li> <li>Chemical Resistance, Good</li> <li>Hydrolytically Stable</li> <li>Paintable</li> <li>Resilient</li> <li>Strength, High</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Cams</li> <li>Gears</li> <li>Hydraulic Applications</li> <li>Parts, Machine/Mechanical</li> <li>Sporting Goods</li> </ul>
Agency Ratings	<ul style="list-style-type: none"> <li>EU 2000/53/EC</li> <li>EU 2002/96/EC</li> <li>EU 2003/11/EC</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>Colors Available</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Extrusion</li> <li>Extrusion, Film</li> <li>Injection Molding</li> </ul>

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density -Specific Gravity	1.13	sp gr	23/23°C ASTM D792
Mold Shrink, Linear-Flow	0.0080	in/in	ASTM D955
Mold Shrink, Linear-Trans	0.0080	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus	6000	psi	ASTM D790
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress @ 50%	1000	psi	ASTM D412
Tensile Stress @ 100%	1100	psi	ASTM D412
Tensile Stress @ 300%	2000	psi	ASTM D412
Tensile Str @ Yield Elast	5000	psi	ASTM D412
Elongation @ Break Elast	450	%	ASTM D412
Tear Strength	550	lbf/in	ASTM D624
Compression Set (73 °F)	20	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (A Scale)	90		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittle Temperature	-90.0	°F	ASTM D746
Glass Transition Temp	-47.0	°F	ASTM E1356
Vicat Softening Point	223	°F	ASTM D1525

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(Polyether)

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 220	°F
Drying Time	1.0 to 3.0	hr
Suggested Max Moisture	0.030	%
Suggested Max Regrind	20	%
Rear Temperature	360 to 390	°F
Middle Temperature	360 to 400	°F
Front Temperature	360 to 410	°F
Nozzle Temperature	370 to 415	°F
Processing (Melt) Temp	395	°F
Mold Temperature	60.0 to 110	°F
Injection Pressure	6000 to 14000	psi
Screw Speed	40 to 80	rpm
Clamp Tonnage	3.0 to 5.0	tons/in <sup>2</sup>
Screw L/D Ratio	20.0:1.0	
Screw Compression Ratio	2.0:1.0 to 3.0:1.0	

## Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.