

**Tenac™-C Z4520**  
**Acetal (POM) Copolymer**  
**Asahi Kasei Plastics North America Inc.**



**Prospector**

**General**

Material Status	• Commercial: Active
Availability	• North America
Forms	• Pellets

Physical	Nominal Value	Unit	Test Method
Melt Mass-Flow Rate (MFR)	9.3	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.5	%	
Flow	2.2	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2600	MPa	ISO 527-2
Tensile Stress (Yield)	64.0	MPa	ISO 527-2
Tensile Strain (Break)	34	%	ISO 527-2
Flexural Modulus	2500	MPa	ISO 178
Flexural Strength	85.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	5.80	kJ/m <sup>2</sup>	ISO 179

**Additional Information**

The values shown for Molding Shrinkage, ISO 294-4, were tested in accordance with Asahi test methods.

Injection	Nominal Value	Unit
Drying Temperature	82.2	°C
Drying Time	3.0 to 4.0	hr
Rear Temperature	180 to 190	°C
Middle Temperature	190 to 200	°C
Front Temperature	200 to 210	°C
Nozzle Temperature	200 to 210	°C
Mold Temperature	48.9	°C
Injection Pressure	75.8 to 138	MPa
Holding Pressure	75.8 to 138	MPa
Back Pressure	0.345	MPa
Screw Speed	20 to 100	rpm
Screw Compression Ratio	3.0:1.0 to 4.5:1.0	

**Injection Notes**

Mold Temperature: > 120°F  
Injection Speed: 1-5 Seconds  
Drying Conditions: Usually not necessary  
Cooling Time: Short  
Screw Type: General  
Slightly longer cycle times may be required to mold wall thicknesses over 1/4 inch.  
Slightly higher injection pressures and mold temperatures may be required to mold wall thicknesses below 0.100 inches.

**Notes**

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