

Asahi Kasei Plastics North America, Inc.

AsahiKASEI

Monday, 13 July 2009

Tenac™-C 9520

Asahi Kasei Plastics North America Inc. - Acetal (POM) Copolymer

Unit System:

Actions

Legend ([Open](#))

General Information

General

Material Status	● Commercial: Active
Availability	● North America
Features	● Copolymer ● General Purpose ● High Flow
Uses	● Fasteners
Forms	● Pellets

ASTM and ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.41		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	70	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.016 to 0.020	in/in	ASTM D955
Molding Shrinkage - Across Flow	0.016 to 0.020	in/in	ASTM D955
Water Absorption (Saturation)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	8850	psi	ASTM D638
Tensile Elongation (Break)	40	%	ASTM D638
Flexural Modulus	381000	psi	ASTM D790
Flexural Strength	13100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	0.731	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	230	°F	ASTM D648
CLTE - Flow	0.000056	in/in/°F	ASTM D696

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	356 to 374	°F
Middle Temperature	374 to 392	°F
Front Temperature	392 to 410	°F
Nozzle Temperature	392 to 410	°F
Mold Temperature	120	°F
Injection Pressure	11000 to 20000	psi
Holding Pressure	11000 to 20000	psi
Back Pressure	50.0	psi
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

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

accuracy of this data. However, IDES assumes no responsibility for the data values and strongly encourages that upon final material selection, data points are validated with the material supplier.