

TENAC™-C 4590

Asahi Kasei Corporation - Acetal (POM) Copolymer

General Information
General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Drinking Water Contact Acceptable
Uses	• Cosmetics • Non-specific Food Applications
Agency Ratings	• ACS ¹ • KTW ¹ • WRAS ¹ • EU 10/2011 • NSF STD-61
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >POM<

Properties²

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.016 to 0.020	in/in	Internal Method
Water Absorption (24 hr, 73°F, 50% RH)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392000	psi	ISO 527-1
Tensile Stress (Yield)	9140	psi	ISO 527-2
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	363000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	3.3	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	212	°F	ISO 75-2/A
CLTE - Flow	5.6E-5	in/in/°F	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.030 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	176 to 194	°F
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	356 to 410	°F
Mold Temperature	> 140	°F

Notes
¹ These ratings apply only to Made in China.

² Typical properties: these are not to be construed as specifications.
