



TENAC™-C 4590

Asahi Kasei Corporation - Acetal (POM) Copolymer

General Information

General

Features AKEP website	• Drinking Water Contact Acceptable	• Food Contact Acceptable
Uses	• Cosmetics	• Non-specific Food Applications
Agency Ratings	• ACS ¹ • EU 10/2011	• KTW ¹ • NSF STD-61 • WRAS ¹
Processing Method	• Injection Molding	
Part Marking Code (ISO11469) (ISO 11469)	• >POM<	

ASTM & ISO Properties ²

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	1.6 to 2.0	%	Internal Method
Water Absorption (24 hr, 23°C, 50% RH)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2700	MPa	ISO 527-1
Tensile Stress (Yield)	63.0	MPa	ISO 527-2
Tensile Strain (Break)	35	%	ISO 527-2
Flexural Modulus	2500	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	7.0	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	100	°C	ISO 75-2/A
CLTE - Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94

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Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	80 to 90	°C
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	180 to 210	°C
Mold Temperature	> 60	°C

Notes

- ¹ These ratings apply only to Made in China.
- ² Typical properties: these are not to be construed as specifications.