【Inquiries】
AsahiKASEI Engineering Plastics Information Comprehensive Site
URL : https://www.asahi-kasei-plastics.com/en/contact/

AsahiKASEI

TENAC™-C 4590

Asahi Kasei Corporation - Acetal (POM) Copolymer

Wednesday, March 20, 2024

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
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<		

Other Documentation	
Literature	• Molding Conditions • SDS • Technical Handbook

ASTM & ISO Properties [2]

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	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
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	2500	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	7.0	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	100	°C	
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

Disclaimer:
- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.
  These data may be changed because of improvement in properties.
- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.
- Do not use plastics in any of the following orally- or medically-related applications.
- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.
  For drinking water application, please consult Asahi Kasei Corporation.
- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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Processing Information		
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.