

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site
URL : <https://www.asahi-kasei-plastics.com/en/contact/>

AsahiKASEI



TENAC™ Z3010

Asahi Kasei Corporation - Acetal (POM) Homopolymer

Tuesday, March 19, 2024

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features AKEP website	• Creep Resistant • Fatigue Resistant	• Viscosity, High • VOC, Low	
Uses	• Automotive Applications • Engineering Parts	• Gears • Housings	
Automotive Specifications	• DAIMLER DBL 5403.00	• DAIMLER DBL 5410.00	
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403)		
Part Marking Code (ISO11469) (ISO 11469)	• >POM<		

Other Documentation

- Literature
- [Molding Conditions](#)
 - [SDS](#)
 - [Technical Handbook](#)

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.4	g/10 min	ISO 1133
Molding Shrinkage - Flow	1.8 to 2.2	%	Internal Method
Water Absorption (24 hr, 23°C, 50% RH)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3000	MPa	ISO 527-1
Tensile Stress (Yield)	70.0	MPa	ISO 527-2
Nominal Tensile Strain at Break	50	%	ISO 527-2
Flexural Modulus	2800	MPa	ISO 178
Taber Abrasion Resistance	13.0	mg	ASTM D1044
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	13	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	94		
R-Scale	120		

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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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
Specific Heat	1470	J/kg/°C	
Thermal Conductivity	0.23	W/m/K	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16 to 1.0E+17	ohms	ASTM D257
Volume Resistivity (23°C)	1.0E+15 to 1.0E+16	ohms-cm	ASTM D257
Dielectric Strength	18	kV/mm	ASTM D149
Dielectric Constant (23°C, 1 MHz)	3.80		ASTM D150
Dissipation Factor (23°C, 1 MHz)	7.0E-3		ASTM D150
Arc Resistance	250	sec	ASTM D495
Additional Information	Nominal Value	Unit	Test Method
Formaldehyde Emissions	< 2	ppm	VDA 275

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	190 to 210	°C
Mold Temperature	> 60	°C

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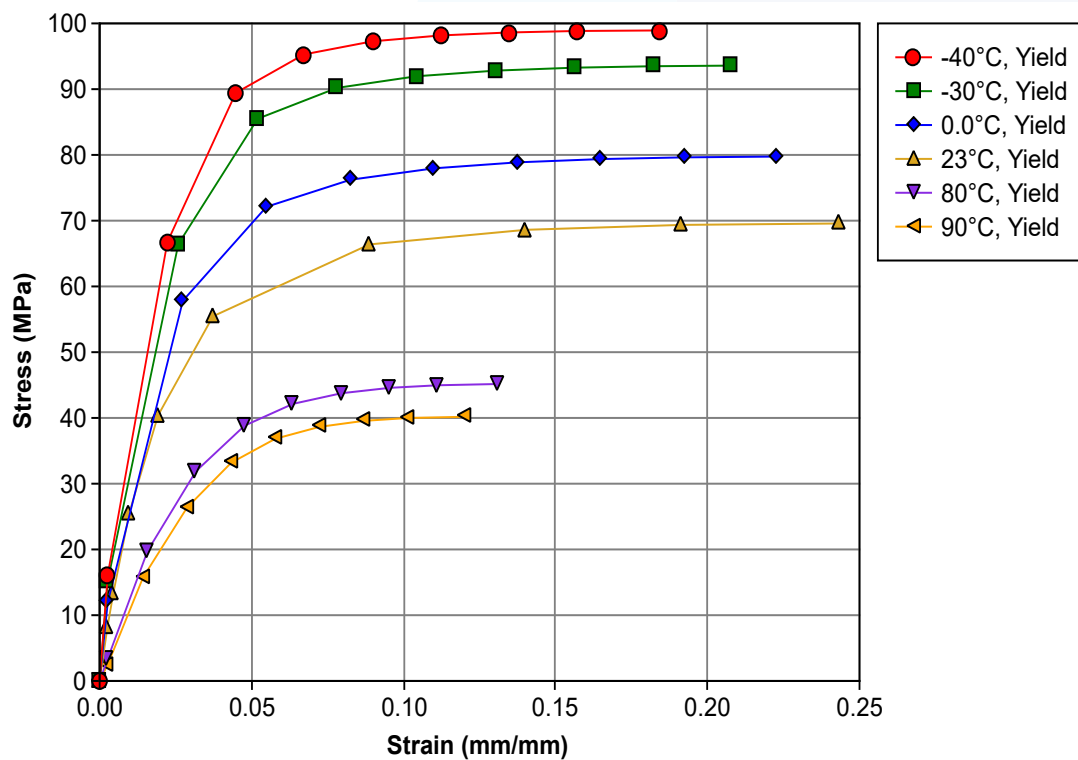
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Curve Data

Isothermal Stress vs. Strain (ISO 11403)



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Notes

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



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