

TENAC™-C LV450

Asahi Kasei Corporation - Acetal (POM) Copolymer

General Information

General			
Additive	• Lubricant		
Features AKEP website	• Friction, Low	• Lubricated	• Wear Resistant
Uses	• Engineering Parts	• Gears	• Housings
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403)		
Part Marking Code (ISO11469) (ISO 11469)	• >POM+SI<		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity			
--	1.39	g/cm ³	ASTM D792
--	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	61.0	MPa	ISO 527-2
--	56.0	MPa	ASTM D638
Tensile Elongation			
Break	25	%	ASTM D638
Break	20	%	ISO 527-2
Flexural Modulus	2600	MPa	ASTM D790 ISO 178
Flexural Strength	89.0	MPa	ASTM D790



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Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	5.0	kJ/m²	ISO 179
Notched Izod Impact	56	J/m	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	86		
R-Scale	117		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	157	°C	ASTM D648 ISO 75-2/B
1.8 MPa, Unannealed	100	°C	ASTM D648 ISO 75-2/A
CLTE - Flow	1.0E-4	cm/cm/°C	ASTM D696 ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94

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	



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Curve Data

Isothermal Stress vs. Strain (ISO 11403)

