

TENAC™-C LV450

Asahi Kasei Corporation - Acetal (POM) Copolymer

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Lubricant		
Features	• Low Friction	• Lubricated	• Wear Resistant
Uses	• Engineering Parts	• Gears	• Housings
Part Marking Code (ISO 11469)	• >POM+SI<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.39		ASTM D792
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 Strength	8120	psi	ASTM D638
Tensile Stress (Yield)	8850	psi	ISO 527-2
Tensile Elongation (Break)	25	%	ASTM D638
Nominal Tensile Strain at Break	20	%	ISO 527-2
Flexural Modulus	377000	psi	ASTM D790
Flexural Modulus	377000	psi	ISO 178
Flexural Strength	12900	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	2.4	ft·lb/in ²	ISO 179
Notched Izod Impact	1.0	ft·lb/in	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 (66 psi, Unannealed)	315	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	315	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	212	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	212	°F	ISO 75-2/A
CLTE - Flow	5.6E-5	in/in/°F	ASTM D696
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

