AsahiKASEI

TENAC™-C HC550

Asahi Kasei Corporation - Acetal (POM) Copolymer

General Information

General			
Uses	• Automotive Applications • Engineering Parts	• Gears • General Purpose	• Housings
Part Marking Code (ISO11469) (ISO 11469)	• >POM<		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41	g/cm³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	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	2850	MPa	ISO 527-1
Tensile Stress			
Yield	67.0	MPa	ISO 527-2
--	66.0	MPa	ASTM D638
Tensile Elongation (Break)	33	%	ASTM D638 ISO 527-2
Flexural Modulus			
--	2720	MPa	ASTM D790
--	2700	MPa	ISO 178
Flexural Strength	96.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.0	kJ/m²	ISO 179
Notched Izod Impact	70	J/m	ASTM D256

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Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	90		
R-Scale	117		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	163	°C	ASTM D648
0.45 MPa, Unannealed	160	°C	ISO 75-2/B
1.8 MPa, Unannealed	124	°C	ASTM D648
1.8 MPa, Unannealed	105	°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
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

Notes

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