TENAC™-C Z4563

Asahi Kasei Corporation - *Acetal (POM) Copolymer*

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Weather Resistance	• Low VOC	• UV Resistant
Uses	• Automotive Applications • Engineering Parts	• Gears • Housings	
Part Marking Code (ISO 11469)	• >POM<		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41		ASTM D792
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	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	363000	psi	ISO 527-1
Tensile Strength	8990	psi	ASTM D638
Tensile Stress (Yield)	8850	psi	ISO 527-2
Tensile Elongation (Break)	42	%	ASTM D638
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	355000	psi	ASTM D790
Flexural Modulus	341000	psi	ISO 178
Flexural Strength	12800	psi	ASTM D790
Taber Abrasion Resistance	14.0	mg	ASTM D1044
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	2.9	ft·lb/in²	ISO 179
Notched Izod Impact	1.2	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness			ASTM D785
M-Scale	80		
R-Scale	115		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	316	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	306	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	230	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	196	°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
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+16 to 1.0E+17	ohms	ASTM D257
Volume Resistivity (73°F)	1.0E+15 to 1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	480	V/mil	ASTM D149
Arc Resistance	250	sec	ASTM D495

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

Notes

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