Tenac™-C 4510

Acetal (POM) Copolymer

Asahi Kasei Chemicals Corporation

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Features	• Fatigue Resistant • General Purpose • Good Abrasion Resistance • Good Creep Resistance	• Good Dimensional Stability • Good Stiffness • Good Toughness • Good Wear Resistance	• High Friction • High Strength
Uses	• Cams	• Gears	• Machine/Mechanical Parts
Forms	• Pellets		

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.41	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.6 to 2.0	%	ASTM D955
Water Absorption (Saturation)	0.20	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2]	60.8	MPa	ASTM D638
Tensile Elongation [2] (Break)	60	%	ASTM D638
Flexural Modulus	2600	MPa	ASTM D790
Flexural Strength	88.3	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	58.8	J/m	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			ASTM D648
0.45 MPa, Unannealed	158	°C	
1.8 MPa, Unannealed	110	°C	
Melting Temperature	167	°C	
CLTE - Flow	0.00010	cm/cm/°C	ASTM D696
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating - UL	HB		UL 94

Notes

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

[2] 5.0 mm/min

Revision History
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