

Tenac™ 4050

Acetal (POM) Homopolymer
Asahi Kasei Chemicals Corporation

Message:

Tenac™ 4050 is an Acetal (POM) Homopolymer product. It is available in Africa & Middle East, Asia Pacific, Europe, or North America. Applications of Tenac™ 4050 include engineering/industrial parts and housings.

Characteristics include:

- Flame Rated
- Creep Resistant
- Good Dimensional Stability
- Good Toughness
- High Stiffness

General Information	
UL YellowCard	E48285-520259
Features	Durable
	Good Creep Resistance
	Good Dimensional Stability
	Good Toughness
	High Impact Resistance
	High Stiffness
	High Strength
	Homopolymer
	Medium Viscosity
Uses	Engineering Parts
	Fasteners
	Gears
	General Purpose
	Housings

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.42	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.0	g/10 min	ISO 1133
Molding Shrinkage - Flow	1.8 to 2.2	%	Internal Method
Water Absorption (23°C, 24 hr, 50% RH)	0.20	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	94		
R-Scale	120		
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3300	MPa	ISO 527-2

Tensile Stress			
Yield	76.0	MPa	ISO 527-2
--	73.0	MPa	ASTM D638
Tensile Elongation			
Break	35	%	ASTM D638
Break	30	%	ISO 527-2
Flexural Modulus			
--	3040	MPa	ASTM D790
--	3000	MPa	ISO 178
Flexural Strength	105	MPa	ASTM D790
Taber Abrasion Resistance	13.0	mg	ASTM D1044
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	11	kJ/m ²	ISO 179
Notched Izod Impact	90	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	172	°C	ASTM D648
0.45 MPa, Unannealed	165	°C	ISO 75-2/B
1.8 MPa, Unannealed	136	°C	ASTM D648
1.8 MPa, Unannealed	110	°C	ISO 75-2/A
CLTE - Flow	1.0E-4	cm/cm/°C	ASTM D696, 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
Dielectric Strength	18	kV/mm	ASTM D149
Dielectric Constant (23°C, 1 MHz)	3.80		ASTM D150
Dissipation Factor (23°C, 1 MHz)	7.0E-3		ASTM D150
Arc Resistance	250	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.750 mm)	HB		UL 94

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT