

Product Texts

TENAC™ 3010 is an Acetal (POM) Homopolymer product. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America. Applications of TENAC™ 3010 include automotive, engineering/industrial parts, conveyors and housings.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	2.4	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Melt flow index, MFI	2.8	g/10min	ISO 1133
^[C] Thermal conductivity of melt	0.2	W/(m K)	-
^[C] Spec. heat capacity of melt	2000	J/(kg K)	-

[C]: CAMPUS

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3000	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus, 23°C	2800	MPa	ISO 178
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	13	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C	-	-

ASTM Data

Tensile Strength	69	MPa	ASTM D 638
Elongation at Break	50	%	ASTM D 638
Flexural Modulus	2700	MPa	ASTM D 790
Flexural Strength	96	MPa	ASTM D 790
Rockwell Hardness	R 120	-	ASTM D 785
Taber Abrasion Resistance	13	mg/1000 cycles	ASTM D 1044

[C]: CAMPUS

Thermal properties

	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	100	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	163	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	100	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-

ASTM Data

UL 94 Flame rating	HB	-	UL 94
Coefficient of Thermal Expansion, MD	100	E-6/K	ASTM D 696
DTUL @ 66 psi	172	°C	ASTM D 648
DTUL @ 264 psi	133	°C	ASTM D 648

[C]: CAMPUS

Electrical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Dissipation factor, 1MHz	70	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	18	kV/mm	IEC 60243-1

ASTM Data

Dielectric Strength, Short Time	18	kV/mm	ASTM D 149
Surface Resistivity	1E17	Ohm	ASTM D 257
Volume Resistivity	1E16	Ohm*cm	ASTM D 257
Arc Resistance	250	s	ASTM D 495

[C]: CAMPUS

TENAC™ 3010

POM

Asahi Kasei

Other properties	Value	Unit	Test Standard
^[C] Density	1420	kg/m ³	ISO 1183
Water Absorption, 24hr	0.2	%	ASTM D 570
Density	1420	kg/m ³	ASTM D 792

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	190 - 210	°C	-
Mold temperature	60	°C	-

Characteristics**Processing**

Injection Molding, Profile Extrusion, Sheet Extrusion, Other Extrusion

Delivery form

Pellets

Special Characteristics

High impact or impact modified

Features

Homopolymer

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa