Panlite® G-3410H

PC-GF10 — Teijin Chemicals Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.004**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.005**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**3300**	MPa	ISO 527
Stress at break	**70**	MPa	ISO 527
Strain at break	**4**	%	ISO 527
Flexural modulus, 23°C	**3400**	MPa	ISO 178
Flexural strength	**115**	MPa	ISO 178
Charpy impact strength, +23°C	**70**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**8**	kJ/m²	ISO 179/1eA
ASTM Data			
Tensile Modulus	**3530**	MPa	ASTM D 638
Tensile Strength at Break	**69**	MPa	ASTM D 638
Elongation at Break	**5.5**	%	ASTM D 638
Compressive Strength	**96**	MPa	ASTM D 695
Flexural Modulus	**3340**	MPa	ASTM D 790
Flexural Strength	**118**	MPa	ASTM D 790
Rockwell Hardness	**M 86**	-	ASTM D 785
Izod Impact notched, 1/8 in	**49**	J/m	ASTM D 256
Izod Impact notched, 1/4 in	**49**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**135**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**142**	°C	ISO 75-1/-2
Vicat softening temperature, B	**145**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**50**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**60**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-
ASTM Data			
UL 94 Flame rating	**V-2**	-	UL 94
Thickness tested	**0.8**	mm	-
Coefficient of Thermal Expansion, MD	**52**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**74**	E-6/K	ASTM D 696

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	**3.2**	-	IEC 62631-2-1
Relative permittivity, 1MHz	**3.2**	-	IEC 62631-2-1
Dissipation factor, 100Hz	**10**	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	**90**	E-4	IEC 62631-2-1
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
Electric strength	**35**	kV/mm	IEC 60243-1
Comparative tracking index	**175**	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	**30**	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	**0.0009**	-	ASTM D 150
Dissipation Factor, 1 MHz	**0.011**	-	ASTM D 150
Dielectric Constant, 60 Hz	**3.16**	-	ASTM D 150
Dielectric Constant, 1 MHz	**3.07**	-	ASTM D 150
Volume Resistivity	**1E16**	Ohm*cm	ASTM D 257
Arc Resistance	**100**	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Density	**1270**	kg/m³	ISO 1183
Water Absorption, Equilibrium	**0.16**	%	ASTM D 570

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**>5**	h	-
Melt temperature	**290 - 320**	°C	-
Mold temperature	**80 - 120**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Features
Creep Resistance

Applications
Electrical and Electronical

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