



Typical Properties Data Sheet

The Supplier of Engineering Plastics
Rods, Sheets, Tubes, Profiles and Machining Parts

Lasenic® PP Properties Data Sheet

① Raw material description

Standard Grade:	Extrusion grade	Appearance color:	---
Application:	Processing materials,rod, sheet,board,tube.Used in medical equipment,stewing endurance tableware,food packaging, acid-proof and alkali resistance containers, home appliances.		
Remarks:	Characters: non-toxic,tasteless,low density,strength,rigidity,hardness,heat resistance is lower than HDPE, with superior electrical property and high frequency insulation,no effect for humidity.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I.Physical property				
Density	23°C	ASTM D792	0.9	g/cm ³
Shrinkage	---	ASTM D955	1~2.5	%
Water absorption	---	ASTM D570	0.01	%
Flammability class	---	UL94	HB	Class
II .Mechanical property				
Tensile strength	---	ASTM D638	29	MPa
Tebisike modules of elasticity	---	ASTM D638	1.10~1.55	GPa
Elongation at break	---	ASTM D638	>200	%
Flexural strength	---	ASTM D790	50	MPa
Flexural modulus	---	ASTM D790	1.18~1.72	GPa
Compressive strength	---	ASTM D790	45	MPa
Compression modulus	---	ASTM D790	1.03~2.07	GPa
Hardness-Rockwell	---	ASTM D785	80~110	R (Scale)
Hardness-Shore D	---	ASTM D2240	70	D
Cantilever beam impact strength	---	ASTM D256	≥15	J/m
Cantilever beam impact strength (with gap)	23°C	ASTM D256	3.68~11.86	KJ/m ²
Coefficient of friction	---	ASTM D1894	0.5	---
III.Thermal property				
Thermal deformation temperature	1.82MPa	ASTM D648	52~60	°C
Thermal deformation temperature	0.46MPa	ASTM D648	93~121	°C
Max. working temperature(short time)	---	UL746B	120	°C
Max. working temperature(long time)	---	UL746B	100	°C
Vicat softening temperature	---	ASTM D1525	>140	°C
Brittle temperature	---	ASTM D746	-8~8	°C
Thermal conductivity	23°C	ASTM C177	0.24	W/(m*K)
Coefficient linear thermal expansion	---	ASTM D696	6~10	10 ⁻⁵ K ⁻¹

IV. Electrical property				
Dielectric constant	1 MHz	IEC 60250	2.15	10 ⁶ Hz
Dielectric loss angle tangent	1 MHz	IEC 60250	0.0008	10 ⁶ Hz
Dielectric strength	---	IEC 60243	24.6	kV/mm
Volume resistivity	---	IEC 60093	≥10 ¹⁶	Ω * cm
Surface resistivity	---	IEC 60093	>10 ¹³	Ω
Electric arc resistance	---	IEC 61621	185	sec
NOTE: 1 g/cm ³ = 1,000 kg/m ³ , 1 Mpa = 1 N/mm ² , 1kV/mm = 1 MV/m				
Statement:				
NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Quanda will not provide any legally binding guarantee of certain properties, or any suitability.				