



Typical Properties Data Sheet

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

Lasenic® C-PVC Properties Data Sheet

① Raw material description

Standard Grade:	Extrusion grade	Appearance color:	---
Applications:	Processing material , rods, plates, tubes; can be used for the hot sewage pipe, plating solution pipe, heat pipes chemicals, chlor-alkali plants wet chlorine gas pipeline, filter materials, dehydration, etc., It can also produce electric and electronic parts. The protective layer wire ducts, conductors, electrical switches, fuses protective cover, cable insulation materials.		
Remarks:	CPVC material improve the physical and mechanical properties. And Good heat resistance,And acid, alkali, salt, oxidants corrosion resistance.		

② Raw material technical data sheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Density	---	ASTM D792	1.48-1.58	g/cm ³
Shrinkage	23°C	---	≤0.5	%
Absorption	24h dipping (23°C)	ASTM D570	0.2	%
Flammability class	---	UL94	V-0	Class
II. Mechanical property				
Impact strength(notched)	3.2mm/23°C	ASTM D256	288	J/m
Tensile strength	22°C/53%RH	ASTM D638	61	MPa
Tensile breaking strength	---	ASTM D638	52~62	MPa
Tensile modulus	---	ASTM D638	2482~3280	MPa
Compression strength	---	ASTM D695	60	MPa
Coefficient of compressibility	---	ASTM D695	1460	MPa
Elongation at break	30mm/min	ASTMD638	11	%
Bending coefficient	22°C/53%RH	ASTM D790	1418	MPa
Flexural strength	22°C/53%RH	ASTM D790	81	MPa
Hardness-Rockwell	---	ASTM D785	117~122	R (Scale)
Hardness- shore D	---	ASTM D2240	90	D
impact strength of simple beam (no gap)	maximum value	---	237	KJ/m ²
	minimum value	ASTM D256	54	KJ/m ²
	mean value	---	130	KJ/m ²
Coefficient of friction	---	ASTM D1894	0.6	---
III. Thermal property				
Thermal deformation temperature	1.8MPa Annealed	ASTM D648	106	°C
Max. working temperature(notched)	---	UL746B	100~105	°C
Max. working temperature(long time)	---	UL746B	90	°C

Melting temperature	---	ASTM D2133	327	°C
Brittle temperature	---	ASTM D746	-70	°C
Heating size rate of change	longitudinal	---	+0.1	%
	transverse	---	+0.4	%
Thermal conductivity	23°C	ASTM C177	0.15	W/(m*k)
Coefficient of linear thermal expansion	---	ASTM D696	7~25	$\times 10^{-5} K^{-1}$
IV. Electrical property				
Dielectric constant	---	ASTM D150	4~5	$10^6 Hz$
Dielectric loss angle tangent	---	ASTM D150	0.02	$10^6 Hz$
Dielectric strength	---	ASTM D149	9.85~35	KV.mm
Volume resistivity	---	ASTM D257	$10^{13} \sim 10^{14}$	$\Omega \cdot cm$
Surface resistivity	---	ASTM D257	$\geq 10^{13}$	Ω
Electric arc resistance	---	ASTM D495	70	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.				