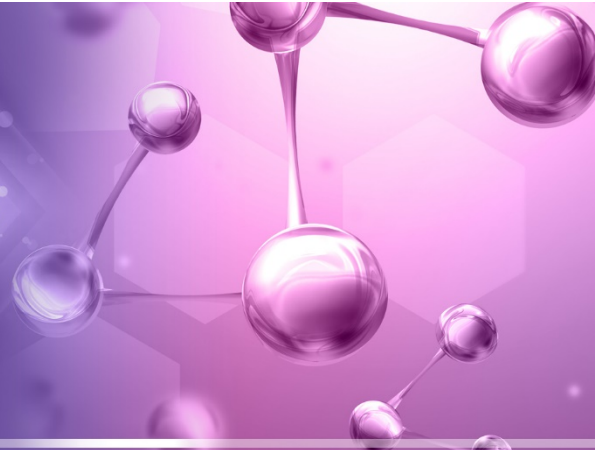


Typical engineering Properties of COMMERCIAL PARYLENE



GENERAL	N	C	D	F
Density g/cm ³	1.3	1.4	1.3	1.1
Refractive index, n _{D23}	1.6	1.7	1.6	1.7
MECHANICAL				
Tensile modulus, GPa	3.6	2.8	3.2	2.4
Tensile strength, psi	7500	11000	10000	7000
Yield strength, MPa	49	60	55	42
Elongation to break, %	13.9	10	200	30
Yield elongation, %	2	3	2.9	2.5
Rockwell hardness	R122	R80	R80	R85
Coefficient of friction-static	0.15	0.33	0.29	0.25
Coefficient of friction-dynamic	0.13	0.31	0.29	0.25
THERMAL				
Linear coefficient of expansion 25°C (ppm)	36	38	35	69
heat capacity at 25°C, J/(g.k)		*	1	1.3
Thermal conductivity 25°C KW/(m.K)	0.1	*	0.08	0.13
ELECTRICAL				
Dielectric constant				
60 Hz	2.65	3.15	2.84	2.1
1 KHz	2.65	3.1	2.82	2.2
1 MHz	2.65	2.95	2.8	2.17
Dissipation factor				
60 Hz	0.0002	0.02	0.004	0.0002
1 KHz	0.0002	0.019	0.003	0.002
1 MHz	0.0006	0.013	0.002	0.001
Dielectric strength at 25µm V/mil	7000	5600	5500	5400
Volume resistivity Ω at 23°C, 50% rh	2X10 ¹⁷	1.2X10 ¹⁷	8.8X10 ¹⁶	1.4X10 ¹⁷
surface resistivity Ω at 23°C, 50% rh	5X10 ¹⁵	1X10 ¹⁶	1X10 ¹⁴	1X10 ¹³
BARRIER				
Water absorption (after 24 hrs), %	<0.01	<0.1	<0.1	<0.01
Water vapour transmission at 37°C %, ng/(Pa.s.m)	0.0004	0.0002	0.0012	
Gas permeability at 25°C amol/(Pa.s.m)				
N ₂	9	2	15.4	
O ₂	64	14.4	78.4	
CO ₂	26	15.4	429.0	
H ₂ S ₂	2.9	26	1590.0	
SO ₂	9.53	22	3790.0	
Cl ₂	1.1	0.7	148.0	



בית זרזיר, גבעת אלה ת.ד. 11 שמשית 1790600

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