

附录 5 含氟聚合物树脂的一般特性

项目 Item	PVDF	ETFE	FEP	PTFE	PFA	LFF
绝缘耐压 (kV/mm) Voltage withstand	20-35	20-35	15-30	20-30	20-35	20-30
体积电阻率 ($\Omega \cdot \text{cm}$) Volume resistivity	>1014	>1016	>1018	>1018	>1018	>1016
介电常数 Dielectric constant	3.5-8	2.6	2.1	2.1	2.1	3.8
介电损耗因数 (%) Dissipation factor	5-25	0.2	0.03	0.02	0.02	-
抗拉强度 (Mpa) Tensile strength	39-59	59-69	20-25	15-32	17-29	8-18
伸长率 (%) Elongation	350-450	200-300	100-300	100-300	100-300	350
比重 Specific gravity	1.77	1.7	2.2	2.2	2.2	1.7
软化温度 ($^{\circ}\text{C}$) Softening temperature	149	270	285	327	305	-
额定温度 ($^{\circ}\text{C}$) Rating temperature	105	150	200	250	250	200
难燃性 Flammability	◎	◎	◎	◎	◎	◎
耐热老化性 (Aging) Heat resistance	◎	◎	◎	◎	◎	◎
耐热变形性 Heat deformation resistance	◎	◎	◎	◎	◎	◎
耐寒性 Cold resistance	◎	◎	◎	◎	◎	◎
耐气候性 Weather resistance (*3)	◎	◎	◎	◎	◎	◎
耐臭氧性 Ozone resistance	◎	◎	◎	◎	◎	◎
耐油性 Oil resistance	◎	◎	◎	◎	◎	◎
耐酸性 Acid resistance	◎	◎	◎	◎	◎	◎
耐碱性 Alkaline resistance	◎	◎	◎	◎	◎	◎

注：1◎优 Excellent，◇良好 Very Good，○良 Good，△可 Fair，×不可 Poor