

特性 Characteristics		材料名 Name of material	FEP	PFA	TFE	ETFE	硅橡胶 Silicone rubber
电气性能 Electrical properties	体积电阻率 Volume resistance ($\Omega \cdot \text{cm}$ 20°C)	$>10^{18}$	$>10^{18}$	$>10^{18}$	$>10^{15}$	$10^{15} \sim 10^{16}$	
	介电常数 Specific capacity (50~106Hz)	2.1	2.1	2.1	2.6	3~5	
	绝缘场强 Dielectric strength (kV/mm)	20~25	20~40	20	16	20~30	
	损耗角0~正切 Dielectric tangent (50~106Hz%)	0.02~0.07	0.03	0.02	0.06~0.5	2~4	
机械性能 Mechanical properties	抗张强度(MPa) Tensile strength (N/mm ²)	18~25	25	15~34	34~49	4~9	
	伸长率 Elongation(%)	250~330	250~300	200~400	100~400	200~400	
	可挠性 Flexibility	○ Superior	○ Superior	○ Superior	○ Superior	○ Superior	
物理性能 Physical properties	密度(20°C) Specific gravity	2.1~2.2	2.1~2.2	2.1~2.2	1.7	1.1~1.3	
	熔点(°C) Melting point	280	310	320	270	—	
	耐热温度 (连续使用°C) Heat resistant temperature (continuous use°C)	200	260	260	150	180	
	最低使用温度(°C) Min.use temperature	<-80	<-80	<-80	<-100	-60	
其他性能 others	阻燃性 Flame retardant	不燃 Non-flammable	不燃 Non-flammable	不燃 Non-flammable	不燃 Non-flammable	难燃 Flame retardant	
	耐油性 Oil resistance	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	△ Medium resistive	
	耐酸性 Acid resistance	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	○ high resistive	
	耐碱性 Alkali resistance	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	△ Medium resistive	
	耐臭氧 Ozone resistance	◎ Extremely highresistive	◎ Extremely highresistive	◎ Extremely highresistive	○ high resistive	○ high resistive	
	耐水性(吸水率%) Water resistance (water absorptivity%)	◎ Superior	◎ Superior	◎ Superior	○ Superior	× Less resistive	
	加工性 workability	○ Superior	○ Superior	△ Medium	○ Superior	○ Superior	
	价格 Price	高 high	高 high	高 high	高 high	高 high	

Remark: "◎" 极强 "○" 强 or 优 "△" 中 or 良 "×" 弱