

特性 Characteristics		材料名 Name of material	高密度 聚乙烯 High-density polyethylene	低密度 聚乙烯 Low-density polyethylene	阻燃 聚乙烯 Flame retardant polyethylene	交联 聚乙烯 Cross-link polyethylene	PVC
电气性能 Electrical properties	体积电阻率 Volume resistance ($\Omega \cdot \text{cm} 20^\circ\text{C}$)		>10 ¹⁷	>10 ¹⁷	>10 ¹⁵	>10 ¹⁵	10 ¹² ~10 ¹⁵
	介电常数 Specific capacity (50~106Hz)		2.25~2.3	2.25~2.3	2.4~2.7	2.25~3.5	3.5~6
	绝缘场强 Dielectric strength (kV/mm)		0.02~0.05	30~50	20~40	20~40	20~30
	损耗角0~正切 Dielectric tangent (50~106Hz%)		30~50	0.02~0.05	0.2~1	0.02~0.05	8~15
机械性能 Mechanical properties	抗张强度(MPa) Tensile strength (N/mm ²)		19~34	9~19	9~19	9~15	9~24
	伸长率 Elongation(%)		100~400	300~750	300~600	300~500	100~350
	可挠性 Flexibility		△ Normal	○ Superior	○ Superior	○ Superior	○ Superior
物理性能 Physical properties	密度(20℃) Specific gravity		0.95	0.92	0.95~1.2	1.2~1.5	1.2~1.5
	熔点(℃) Melting point		135~140	112~120	110~115	—	130
	耐热温度 (连续使用℃) Heat resistant temperature (continuous use℃)		85	75	80	125~150	70~105
	最低使用温度(℃) Min.use temperature		<-60	<-60	-30~-50	<-40	-15~-40
其他性能 others	阻燃性 Flame retardant		易燃 Easy flammable	易燃 Easy flammable	难燃 Flame retardant	难燃 Flame retardant	难燃 Flame retardant
	耐油性 Oil resistance		△ Medium resistive	△ Medium resistive	△ Medium resistive	○ High resistive	△ Medium resistive
	耐酸性 Acid resistance		△ Medium resistive	△ Medium resistive	△ Medium resistive	△ Medium resistive	× Less resistive
	耐碱性 Alkali resistance		◎ Extremely high resistive	◎ Extremely high resistive	○ High resistive	◎ Extremely high resistive	○ High resistive
	耐臭氧 Ozone resistance		△ Medium resistive	△ Medium resistive	△ Medium resistive	△ Medium resistive	○ High resistive
	耐水性(吸水率%) Water resistance (water absorptivity%)		◎ Superior	◎ Superior	○ Superior	○ Superior	△ Good
加工性 workability		○ Superior	○ Superior	○ Superior	○ Superior	○ Superior	
价格 Price		低 Low	低 Low	低 Low	低 Low	低 Low	

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