Insulation Material Selection Table

Insulation	Material	Temperature Range	Features
PVC	Polyvinyl chloride	-40°C to +105°C	General-purpose insulation; Good abrasion resistance; Excellent flame resistance
XL-PVC	Cross-linked PVC	-55°C to +105°C	Better abrasion and cut-through resistance than standard PVC; Improved temperature and solder iron resistance over standard PVC; Used in high-density wiring
PTFE (Teflon®)	Polytetrafluoroethylene	-55°C to +200°C	High temperature; Chemically inert: excellent chemical and solvent resistance; Excellent dielectric properties
XLPE	Cross-linked polyethylene	-40°C to +125°C	Higher temperature rating than PVC
Silicone	Silicone	-40°C to +180°C	High-voltage material; Excellent flexibility; Excellent dielectric strength and resistance to radiation, corona, and ozone
ETFE (Tefzel®)	Ethylene tetrafluoroethylene	-70°C to +150°C	Widely used in wire wrap applications