

Jacket Materials

SV47 is a proprietary thermoplastic formulation that exceeds the requirements of 105C PVC and outperforms other PVC jacket materials in UV resistance as well as providing low temperature flexibility.

TPU is a thermoplastic polyurethane jacket that offers excellent abrasion resistance and extreme cold temperature workability. TPU also contains no chlorides so it should be selected for applications where chloride stress cracking is a problem.

	Standard 105C PVC	O'Brien SV47	TPU
Abrasion Resistance	G	G	E
Tensile Strength PSI	18-1900	2200	3800
Elongation %	250	350	700
Hardness, Shore A	85-90	80	80
Minimum Service Temperature	None Stated	-25°F/-32°C*	-67°F/-58°C
Minimum Installation Temperature	15°F/-9°C	0°F/-18°C*	-40°F/-40°C
UL94 Flame	V2	V2	V0 to V2
Halogenated (Chlorides)	YES	YES	NO
Maximum Temperature	220°F/105°C	220°F/105°C	250°F/120°C
Water Absorption %	0.1%	0.1%	1.2-1.4%
Aromatic Hydrocarbons	F	F	G
Weathering	G	G	E
UV Resistance	F	G	E

E = Excellent G = Good F = Fair P = Poor

* Minimum service and installation temperature for SV47 have been determined by test on tubing bundles. The base material is rated at -40° by the manufacture when used as jacket for wire and cable. However, this is a false indication of performance when used as a weatherproof jacket on a tubing bundle. Tubing bundles are typically much larger in diameter, more flexible and have a softer 'core' than wire and cable. Consequently the advertised temperatures for what are termed Arctic PVC overstate the useful temperature range on tubing bundles.