



COMPARISON OF MATERIAL PROPERTIES

Properties	Unit	EPR	CSP	PCP	Silicone	EVA	XLPE	PVC GP	PVC HR	PVC FR	PVC Low HCL	PVC Low Temp	XLPO*	Polythene
Type XL or T Ins/Sheath		XL	XL	XL	XL	XL	XL	T	T	T	T	T	XL	T
Max Op. Temp.	°C	90	85	70	180	125/85	90	70	85	70	70	70	125	70
Low Temp.	°C	-40	-30	-30	-55	-20	-40	-15	-15	-15	-15	-40	-65	-60
Dielectric Strength	KV/MM	40	25	20	25	25	21	30	30	30	30	30	40	40
Volume Resistivity	Ω CM	1016	1012	1011	1014	1012	1016	1014	1014	1014	1014	1014	1018	1018
Tensile Strength	N/MM ²	8.0	12-20	12-18	8	10-15	12	12.5-16	12.5-16	12.5-14	13	12.5-14	20	10-12
E @ Break	%	400	400	400	300	280	350	200	230	190	180	200	300	300
Abrasion Resistance		F	E	VG	F	G	G	G	G	G	G	G	E	F
Loi	%	21	30-40	35	34	21.33	19	25	25	32	31	24	30	18
Temp. Index	°C	53	250-350	270	300	250	-	180	180	200	300	160	250	-
Smoke Evol.		Low	Med/High	High	Low	Low	Low	High	High	High	Med	High	Med	Med
Acid Gas Emission		Low	Med/High	High	Low	Low	Low	High	High	High	Med	High	Med	Low
Ozone Resistance		E	VG	VG	G	G	G	G	G	G	G	G	E	E
Weather Resistance		VG	E	VG	G	G	G	G	G	G	G	G	E	P
Oil Resist.		P	VG	VG	F	G	F	G	G	G	G	G	E	VG

E = Excellent G = Good P = Poor

VG = Very Good F = Fair

***Based on Brand Rex's "Polyrad" compound.**

Note: These characteristics vary according to precise compound formulation and therefore are for general guidance only.