



WIRE & CABLE

**Syncure™ XLPE**  
MOISTURE CURABLE POLYETHYLENE  
INSULATION FOR LOW VOLTAGE CABLES

# Syncure™ XLPE

## MOISTURE CURABLE POLYETHYLENE INSULATION FOR LOW VOLTAGE CABLES

System	S100FH	S100FH-UV	S110FV	S110FV-UV	S100BL
<b>Applications</b>	Building Wire, Tray Cable	Building Wire, Tray Cable	Building Wire, Tray Cable	Building Wire, Tray Cable	Service Entrance, Hookup Wire
<b>Specification</b>	UL 44	UL 44	UL 44	UL 44	UL 44
<b>Wire Type</b>	XHHW-2, RHW-2, USE-2, SIS	XHHW-2, RHW-2, USE-2, SIS, PV	XHHW-2, RHW-2, SIS	XHHW-2, RHW-2, USE-2, SIS, PV	XHHW-2, USE-2, SIS
<b>Components %</b>	83% S1054A 17% V0022G RoHS	83% S1054A 17% V-0022G RoHS-UV	50% S1060A 50% V0044G RoHS	50% S1060A 50% V0044G-UV RoHS	79% S1054A 16% V0022G RoHS 5% S1044B
<b>Features</b>	Horizontal Flame Resistant	Horizontal Flame Resistant, UV Resistant, Colors Possible	VW-1, FT-1	VW-1, UV Resistant, Colors Possible	Black, Horizontal Flame Resistant, UV Resistant
<b>GENERAL PROPERTIES</b>					
<b>Specific Gravity</b>	1.02	1.02	1.31	1.31	1.01
<b>Hardness Shore D, 10 Seconds</b>	41	41	46	46	49
<b>Gel</b>	75	75	70	70	68
<b>TENSILE PROPERTIES</b>					
<b>Tensile Strength (psi)</b>	3500	3500	2900	2900	3000
<b>Elongation %</b>	450	450	450	450	400
<b>Tensile Retention %</b>	100	100	110	110	95
<b>Elongation Retention %</b>	90	90	100	100	90
<b>ELECTRICAL</b>					
<b>Dielectric Strength (V/mil)</b>	1215	1375	1245	1400	-
<b>Dielectric Constant</b>	2.42	2.36	2.61	2.62	-
<b>Dissipation Factor %</b>	0.0034	0.0034	0.0043	0.0043	-
<b>THERMAL</b>					
<b>Temperature Rating °C</b>	90	90	90	90	90
<b>Heat Deformation %</b>	5	5	3	3	10
<b>FLAMMABILITY</b>					
<b>Flame Test</b>	HB	HB	VW-1	VW-1	HB

## SPECIALTY APPLICATIONS

S100NA	S112FH	S112NA	S112BL	S100FH-UV	S110FV-UV	S120NA
Service Entrance, Hookup Wire	Building Wire	Building Wire, Teck-90	Service Entrance, Hookup Wire	Photo-Voltaic (PV) Wire	Photo-Voltaic (PV) Wire	Pipe and Tube
UL 44	CSA 22.2	CSA 22.2	CSA 22.2	UL 44, UL 4703	UL 44, UL 4703	Suitable for NSF 61
USE-2	RW-90	RW-90, Teck-90	RWU 90	XHHW-2, RHW-2, USE-2, SIS, PV	XHHW-2, RHW-2, USE-2, SIS, PV	-
95% S1054A 5% S1010B	83% S1054A 17% V0030G RoHS	95% S1054A 5% S1000B	90% S1054A 10% S1044B	70% S1054A 30% V-0022G RoHS-UV	50% S1060A 50% V0044G-UV RoHS	95% S1016A 5% S1037B
Non-FR	Horizontal Flame Resistant	Non-FR	Non-FR, Black, UV Resistant	Horizontal Flame Resistant, FV-1, UV Resistant, Colors Possible	VW-1, FV-1, UV Resistant, Colors Possible	Rigid Pipe Applications
0.93	1.01	0.92	0.94	1.10	1.31	0.95
46	47	47	48	53	46	59
72	68	72	72	85	70	72
3000	3000	3000	2300	2500	2900	4500
400	430	400	500	250	450	80
95	95	95	95	97	110	75
90	90	90	90	94	100	75
1000	-	1000	1000	1350	1400	-
2.14	2.45	2.24	2.45	2.45	2.62	2.1
0.002	0.004	0.0008	0.002	0.008	0.0043	.002
90	90	-	-	90	90	125
10	10	10	7.5	1	3	10
-	HB	-	-	HB, FV-1	VW-1, FV-1	-



The Syncure™ system is a two-step, silane-grafted, moisture cross-linkable polyethylene system (XLPE). Syncure allows for two distinct advantages over regular polyethylene: greatly improved heat resistance and oil resistance. Produced by two-step Sioplas technology, Syncure XLPE offers the processor significant advantages and economies over organic peroxide, radiation and reactor copolymer cross-linking processes.

## FEATURES

- Ambient curing
- Flame performance
- Resistant to heat, oil, creep and abrasion
- Low temperature properties
- Low capital investment
- High extrusion speeds
- UL/CSA bulletins

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