## Syncure<sup>™</sup> XLPE Cross-linkable Polyethylene Formulations FOR LOW VOLTAGE CABLES



## **Syncure<sup>™</sup> XLPE** MOISTURE CROSS-LINKABLE POLYETHYLENE INSULATION FOR LOW VOLTAGE CABLE SYSTEMS

SYSTEM	S100FH	S100FH-XUV	S100FH-UV	\$100FV	S100FV-UV	S112NA	S120NA	S200FH	S200FV
Applications	Building Wire, Tray Cable	Building Wire, Tray Cable	Photo-Voltaic (PV) Wire	Building Wire, Tray Cable	Building Wire, Tray Cable	Building Wire, Teck-90	Pipe and Tube	Building Wire, Tray Cable, Service Entrance	Building Wire, Tray Cable, Service Entrance
Specification	UL 44	UL 44	UL 44, UL 4703	UL 44	UL 44	CSA 22.2	Suitable for NSF 61	UL 44	UL 44
Wire Type	XHHW-2, RHW-2, USE-2, SIS	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	RW-90, Teck-90	-	RHW-2, RHW, RHH, XHHW-2, XHH, XHHW, SIS	RHW, RHH, RHW-2
Components %	83% S1054A 17% V0022G RoHS	83% S1054A 17% V0022G-UV RoHS	70% S1054A 30% V0022G-UV RoHS	50% S1054A 50% V0044G RoHS	50% S1054A 50% V0044G-UV RoHS	95% S1054A 5% S1000B	95% S1016A 5% S1037B	78% S1054A 22% SC5400-0002 RoHS MB ALT FR	50% S1054A 50% SC5400-0003 RoHS MB ALT FR
Features	Horizontal Flame	Horizontal Flame, UV Resistant, Colors Possible	Horizontal Flame, FV-1 Flame, UV Resistant, Colors Possible	VW-1	VW-1, UV Resistant, Colors Possible	Non-FR	Rigid Pipe Applications	Horizontal Flame, DBDPE-free	VW-1, DBDPE-free
GENERAL PROPERTIE	S								
Specific Gravity	1.01	1.02	1.10	1.31	1.31	0.92	0.95	1.01	1.31
Hardness Shore D, 10 Seconds	47	47	47	48	48	47	59	47	48
Gel	68	68	70	70	70	72	72	68	70
TENSILE PROPERTIES	5								
Tensile Strength (psi)	2800	2500	2650	3200	2650	2800	4500	2800	3200
Elongation %	400	400	540	470	540	400	80	400	470
Tensile Retention %	100	100	97	110	110	95	75	95	100
Elongation Retention %	90	90	94	100	100	90	75	90	93
ELECTRICAL									
Dielectric Strength (V/mil)	1000	1400	1400	1200	1200	1000	-	1000	1200
Dielectric Constant	2.31	2.45	2.61	2.61	2.61	2.24	2.1	2.31	2.61
Dissipation Factor %	0.0012	0.0080	0.008	0.0043	0.0043	0.0008	0.002	0.0012	0.0043
THERMAL									
Temperature Rating °C	90	90	90	90	90	90	125	90	90
Heat Deformation %	10	5	5	5	5	10	10	10	5



The Syncure<sup>™</sup> XLPE portfolio is a two-step, silanegrafted, moisture cross-linkable polyethylene system. These materials allow for two distinct advantages over regular polyethylene: greatly improved heat resistance and oil resistance. Produced using Sioplas technology, Syncure XLPE offers the processor significant advantages and economies over organic peroxide, radiation and reactor copolymer crosslinking processes.

## **FEATURES**

- Ambient curing
- Flame performance
- Resistant to heat, oil, creep and abrasion
- · Low temperature properties
- Temperature ratings up to 125°C
- · Low capital investment
- · High extrusion speeds
- UL/CSA bulletins

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