



# Syncure™ System S107FH

## Crosslinked Polyethylene

### Key Characteristics

Product Description	
UL Bullentized, RoHS compliant, silane-grafted (two part), moisture crosslinkable polyethylene system, UL 90°C. Graft resin component of this system has approximate shelf life of 6 months from the date of production. Please consult PolyOne for its use past 6 months.	
General	
Material Status	• Commercial: Active
Regional Availability	• North America
Uses	• Appliances • Wire & Cable Applications
Wire Types	• AWM
Agency Ratings	• CSA CSA, C-22.2, No. 127, • UL 758 Type CL-1251
Forms	• Pellets
Processing Method	• Extrusion Coating

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	0.950	0.950	ASTM D792
Gel Content <sup>2</sup>	72 %	72 %	ASTM D2765
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>3</sup> (Yield)	4500 psi	31.0 MPa	ASTM D638
Tensile Elongation <sup>3</sup> (Break)	400 %	400 %	ASTM D638
Deformation Under Load (268°F (131°C))	10.0 %	10.0 %	UL 1581
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore D	64	64	
Shore D, 10 sec	59	59	
Thermal	Typical Value (English)	Typical Value (SI)	
UL Temperature Rating	257 °F	125 °C	
Aging	Typical Value (English)	Typical Value (SI)	
Retention of Tensile Elongation <sup>4</sup> 316°F (158°C), 75.0 mil (1.91 mm)	75 %	75 %	
Retention of Tensile Strength <sup>4</sup> 316°F (158°C), 75.0 mil (1.91 mm)	75 %	75 %	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Dielectric Constant (1 MHz)	2.50	2.50	ASTM D150
Dissipation Factor (1 MHz)	2.0E-3	2.0E-3	ASTM D150
Additional Information	Typical Value (English)	Typical Value (SI)	
Catalyst Masterbatch - V-0045G RoHS	33 %	33 %	
Grafted Base Resin - S-1054A	67 %	67 %	

NOTE: The above represents Typical Properties measured on 18 AWG with 30 mil wall.

STORAGE AND HANDLING: Use within 48 hours once package is open to avoid self-curing and scrap.

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**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> Crosslinked PE, Method B (NonReferee Test)<sup>3</sup> Type IV, 20 in/min (510 mm/min)<sup>4</sup> 672 hr, UL Standard**CONTACT INFORMATION****Americas**United States - Avon Lake  
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