



Syncure™ System S107FH

Crosslinked Polyethylene

Key Characteristics

Product Description

UL Bullentinized, 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 ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.950	0.950	ASTM D792
Gel Content ²	72 %	72 %	ASTM D2765
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ³ (Yield)	4500 psi	31.0 MPa	ASTM D638
Tensile Elongation ³ (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 ⁴ 316°F (158°C), 75.0 mil (1.91 mm)	75 %	75 %	
Retention of Tensile Strength ⁴ 316°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.

Notes

¹ Typical values are not to be construed as specifications.

² Crosslinked PE, Method B (NonReferee Test)

³ Type IV, 20 in/min (510 mm/min)

⁴ 672 hr, UL Standard



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