



Syncure™ System S100BL

Crosslinked Polyethylene

Key Characteristics

Product Description

Syncure™ S100BL system is a three part moisture crosslinkable compound. S100BL is a UL bulletinized sunlight resistant, RoHS compliant, low density, black cable insulation compound. 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
Features	• Flame Retardant • UV Resistant • Oil Resistant • Weather Resistant
Uses	• Wire & Cable Applications
Wire Types	• RHH • SIS • RHW-2 • USE-2 • XHHW-2
Agency Ratings	• UL 44 • UL 854
Appearance	• Black
Forms	• Pellets
Processing Method	• Extrusion Coating

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.01	1.01	ASTM D792
Gel Content ²	68 %	68 %	ASTM D2765
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ³ (Yield)	2800 psi	19.3 MPa	ASTM D638
Tensile Elongation ³ (Break)	400 %	400 %	ASTM D638
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore D	54	54	
Shore D, 10 sec	49	49	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
UL Temperature Rating	194 °F	90 °C	
Deformation ⁴ (268°F (131°C))	10 %	10 %	UL 1581
Aging	Typical Value (English)	Typical Value (SI)	
Retention of Tensile Elongation ⁵			
250°F (121°C), 75.0 mil (1.91 mm)	90 %	90 %	
Retention of Tensile Strength ⁵			
250°F (121°C), 75.0 mil (1.91 mm)	95 %	95 %	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Test - Horizontal			
--	Pass	Pass	UL 1581
--	Pass	Pass	CSA FT-2
Additional Information	Typical Value (English)	Typical Value (SI)	
Catalyst Masterbatch			
S-1044B ⁶	5.0 %	5.0 %	
V-0022G RoHS ⁷	16 %	16 %	

Additional Information	Typical Value (English)	Typical Value (SI)
Grafted Base Resin - S-1054A ⁸	79 %	79 %
NOTE: The above represents Typical Properties measured on 14 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)

⁴ 500 g, 1hr

⁵ 336 hr, UL Standard

⁶ S-1044B

⁷ V-0022G RoHS

⁸ S-1054A

The logo for PolyOne, featuring the word "PolyOne" in a stylized, italicized serif font with a trademark symbol.

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