Syncure™ System S112BL
Crosslinked Polyethylene

Key Characteristics

Product Description		
Syncure™ systems are two part moisture crosslinkable compounds. S112BL is a CSA listed, high strength, weather resistant, black (2.5% carbon black) cable insulation compound. RoHS compliant. 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	• Weather Resistant	
Uses	• Outdoor Applications	• Wire & Cable Applications
Wire Types	• RW-90	• RWU-90
Agency Ratings	• CSA C-22.2 0.3	
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Extrusion Coating	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.935	0.935	ASTM D792
Gel Content [2]	72 %	72 %	ASTM D2765
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [3] (Yield)	2300 psi	15.9 MPa	ASTM D638
Tensile Elongation [3] (Break)	500 %	500 %	ASTM D638
Tear Resistance [4]	470 lbf/in	82.3 kN/m	ASTM D1004
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness			ASTM D2240
Shore D	52	52	
Shore D, 10 sec	48	48	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deformation [5] (268°F (131°C))	7.5 %	7.5 %	UL 1581
Aging	**Typical Value (English)**	**Typical Value (SI)**	
Retention of Tensile Elongation [6]			
250°F (121°C), 75.0 mil (1.91 mm)	90 %	90 %	
Retention of Tensile Strength [6]			
250°F (121°C), 75.0 mil (1.91 mm)	95 %	95 %	
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Dielectric Strength	1000 V/mil	39 kV/mm	ASTM D149
Dielectric Constant	2.45	2.45	ASTM D150
Dissipation Factor	2.0E-3	2.0E-3	ASTM D150
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Catalyst Masterbatch - S-1044B	10 %	10 %	
Grafted Base Resin - S-1054A	90 %	90 %	

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] Die C, 2 in/min

[5] 500 g, 1hr

[6] 336 hr, UL Standard

PolyOne™

Beyond Polymers.

Better Business Solutions. SM