Syncure™ S1042A Natural

Crosslinked Polyethylene

Key Characteristics

Product Description
Graft Resin component for PolyOne's Syncure™ system, which is a two-step, silane-grafted, moisture-crosslinkable polyethylene system. Graft Resins have 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	• Africa & Middle East • Asia Pacific	• Europe • North America
Uses	• Wire & Cable Applications	
Forms	• Pellets	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.918 g/cm³	0.918 g/cm³	ASTM D1505
Apparent Density [2]	1.70 g/cm³	1.70 g/cm³	Internal Method
Melt Mass-Flow Rate (MFR) [3] (190°C/2.16 kg)	0.73 g/10 min	0.73 g/10 min	ASTM D1238
Appearance	Pellets/Cubes	Pellets/Cubes	ASTM D2090
Gel Content [4]	75 %	75 %	ASTM D2765
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [5] (Break)	1900 psi	13.1 MPa	ASTM D638
Tensile Elongation [5] (Break)	300 %	300 %	ASTM D638
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Brittleness Temperature	-94.0 °F	-70.0 °C	ASTM D746
Deformation [6] (268°F (131°C))	5.0 %	5.0 %	UL 1581

Additional Information
Tensile, Deformation, and Gel measured on a 95 phr S1042A / 5 phr S1000B system; and cured by autoclave for 9 hours.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	160 °F	71.1 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	400 to 420 °F	204 to 216 °C
Middle Temperature	340 to 400 °F	171 to 204 °C
Front Temperature	350 to 400 °F	177 to 204 °C
Nozzle Temperature	350 to 420 °F	177 to 216 °C
Mold Temperature	80.0 to 150 °F	26.7 to 65.6 °C

Notes

[1] Typical values are not to be construed as specifications.

[2] Geon® 1169

[3] Procedure A

[4] Crosslinked PE, Method B (NonReferee Test)

[5] Type IV, 20 in/min (510 mm/min)

[6] 500 g, 1hr

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314

Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas
33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia
No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe
6 Giällewee
+352 269 050 35