



# Syncure™ S1075A

## Crosslinked Polyethylene

### Key Characteristics

#### Product Description

Moisture Crosslinkable Polyethylene Compound. Available as Base Resin component for PolyOne Syncure System.

#### General

Material Status	• Commercial: Active
Regional Availability	• North America
Uses	• Wire & Cable Applications
Forms	• Pellets

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.940 g/cm <sup>3</sup>	0.940 g/cm <sup>3</sup>	ASTM D1505
Apparent Density <sup>2</sup>	0.53 g/cm <sup>3</sup>	0.53 g/cm <sup>3</sup>	Internal Method
Melt Mass-Flow Rate (MFR) <sup>3</sup> (190°C/2.16 kg)	0.32 g/10 min	0.32 g/10 min	ASTM D1238
Appearance	Pellets/Cubes	Pellets/Cubes	ASTM D2090
Gel Content <sup>4</sup>	78 %	78 %	ASTM D2765
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>5</sup> (Break)	3400 psi	23.4 MPa	ASTM D638
Tensile Elongation <sup>5</sup> (Break)	380 %	380 %	ASTM D638
Flexural Modulus	105000 psi	724 MPa	ASTM D790
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deformation <sup>6</sup> (268°F (131°C))	-2.0 %	-2.0 %	UL 1581
Hot Creep Elongation <sup>7</sup>	25 %	25 %	

#### Additional Information

Tensile, Elongation, Deformation, Hot Creep, and Gel measured on a 95 phr S1074A / 5 phr S1000B system; and cured for 6 hours in water at 90 degree C. Flexural Modulus measured on a 96 phr S1075A / 4 phr S1042B system. Pellet appearance is 1/8" cylindrical.

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Geon® 1169

<sup>3</sup> Procedure A

<sup>4</sup> Crosslinked PE, Method B (NonReferee Test)

<sup>5</sup> Type IV, 20 in/min (510 mm/min)

<sup>6</sup> 500 g, 1hr

<sup>7</sup> SYV-40

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