



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 ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|--|-------------------------|-------------------------|-----------------|
| Density | 0.940 g/cm ³ | 0.940 g/cm ³ | ASTM D1505 |
| Apparent (Bulk) Density ² | 0.53 g/cm ³ | 0.53 g/cm ³ | Internal Method |
| Melt Mass-Flow Rate (MFR) ³ (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 ⁴ | 78 % | 78 % | ASTM D2765 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength ⁵ (Break) | 3400 psi | 23.4 MPa | ASTM D638 |
| Tensile Elongation ⁵ (Break) | 380 % | 380 % | ASTM D638 |
| Flexural Modulus | 105000 psi | 724 MPa | ASTM D790 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deformation ⁶ (268°F (131°C)) | -2.0 % | -2.0 % | UL 1581 |
| Hot Creep Elongation ⁷ | 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

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

⁷ SYV-40