

# Syncure™ System S112NA

Crosslinked Polyethylene

PolyOne Corporation

Message:

Syncure™ systems are two part moisture crosslinkable compounds. S112NA is a CSA listed, high strength, colorable power cable insulation compound and 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 Information                                           |                             |                   |             |
|---------------------------------------------------------------|-----------------------------|-------------------|-------------|
| Features                                                      | Industrial resin            |                   |             |
| Uses                                                          | Wire and cable applications |                   |             |
| Wire Types                                                    | NMD90                       |                   |             |
|                                                               | RW-90                       |                   |             |
| Agency Ratings                                                | CSA C-22.2 0.3              |                   |             |
|                                                               | IEC 60502                   |                   |             |
| Appearance                                                    | Natural color               |                   |             |
| Forms                                                         | Particle                    |                   |             |
| Processing Method                                             | Extrusion coating           |                   |             |
| Physical                                                      | Nominal Value               | Unit              | Test Method |
| Specific Gravity                                              | 0.920                       | g/cm <sup>3</sup> | ASTM D792   |
| Gel Content <sup>1</sup>                                      | 72                          | %                 | ASTM D2765  |
| Tensile strength retention rate <sup>2</sup> (121°C, 1.91 mm) | 95                          | %                 |             |
| Elongation retention rate <sup>3</sup> (121°C, 1.91 mm)       | 90                          | %                 |             |
| Deformation <sup>4</sup> (131°C)                              | 10                          | %                 | UL 1581     |
| Catalyst parent mixture-S-1000B <sup>5</sup>                  | 5.0                         | %                 |             |
| Transplant-based resin-S-1054A <sup>6</sup>                   | 95                          | %                 |             |
| Hardness                                                      | Nominal Value               | Unit              | Test Method |
| Durometer Hardness                                            |                             |                   | ASTM D2240  |
| Shaw D                                                        | 53                          |                   | ASTM D2240  |
| Shaw D, 10 seconds                                            | 47                          |                   | ASTM D2240  |
| Mechanical                                                    | Nominal Value               | Unit              | Test Method |
| Tensile Strength <sup>7</sup> (Yield)                         | 19.3                        | MPa               | ASTM D638   |
| Tensile Elongation <sup>8</sup> (Break)                       | 400                         | %                 | ASTM D638   |
| Electrical                                                    | Nominal Value               | Unit              | Test Method |
| Dielectric Strength                                           | 39                          | kV/mm             | ASTM D149   |
| Dielectric Constant (1 MHz)                                   | 2.24                        |                   | ASTM D150   |
| Dissipation Factor (1 MHz)                                    | 8.0E-4                      |                   | ASTM D150   |

| Additional Information | Nominal Value | Unit |
|------------------------|---------------|------|
|------------------------|---------------|------|

注释:以上情况代表了在30密耳壁的14 AWG上测量得出的典型属性.存放和搬运:包装打开之后应在48小时之内使用,避免自硬化和报废.

| NOTE |
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|    |                                                     |
|----|-----------------------------------------------------|
| 1. | Cross-linked PE, Method B<br>(Non-Arbitration Test) |
| 2. | 336 hours, UL standard                              |
| 3. | 336 hours, UL standard                              |
| 4. | 500g, 1 hour                                        |
| 5. | S-1000B                                             |
| 6. | S-1054A                                             |
| 7. | Type 4, 510mm/min                                   |
| 8. | Type 4, 510mm/min                                   |

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