

Cable-Pulling Lubricants



1. Scope

This standard covers the requirements for cable-pulling lubricants.

This standard applies to the following Seattle City Light (SCL) stock numbers:

| Stock No. | Description |
|-----------|--|
| 726223 | Plastic bag, 1/2-gallon |
| 726226 | Plastic jug, pourable version, 1-gallon |
| 726227 | Plastic pail, pourable version, 5-gallon |

2. Application

Cable-pulling lubricants are used to provide maximum tension reduction in high stress electrical and communications cable-pulling operations.

Compatible with most cable types except composite rubber. Cleans up easily with soap and water, Clings to cable throughout long pulls. Remains stable over wide temperature range — usable from 28°F to 180°F (-2°C to 88°C).

The pourable version features the same qualities as the standard product with a lower viscosity for easy pouring and pumping.

3. Industry Standards

Cable-pulling lubricants shall meet the applicable requirements of the latest revision of the following industry standards:

ASTM 1693; Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics

ICEA T-25-425; Guide for Establishing Stability of Volume Resistivity for Semiconducting Polymetric Components of Power Cables

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IEEE Standard 1210; IEEE Standard Tests for Determining Compatibility of Cable Pulling Lubricants with Wire and Cable

NEMA WC 5; Thermoplastic-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

NEMA WC 7; Cross-Linked-Thermosetting-Polyethylene-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

UL Subject 267; Investigation for Wire-Pulling Compounds

4. Requirements

Cable-pulling lubricants shall be polymer/water-based.

Cable-pulling lubricants shall meet the requirements cited in Table 4.

Table 4. Requirements for Cable-Pulling Lubricants

| | |
|--------------------------------------|--|
| Compatibility | Compatible with most cable types except composite rubber |
| Viscosity, standard product | 25,00-40,000 cps @ 10rpm |
| Viscosity, pourable version | Nominally less than the standard product |
| Application Temperature Range | 28°F to 120°F (-2°C to 49°C) |
| Usage | For outdoor use only |
| Acceptable pH Range | 7.0 to 9.0 |
| Method of application | Hand, brush, or pump |
| Cleanup method | Clean easily with soap and water |
| Properties | Alkali-free, acid-free, and contain no significant soap |
| Safety | Non-toxic, non-flammable, and non-corrosive |
| Appearance | Cream-colored, blue gel, stringy gel |
| Shelf life | 18 months |

5. Packaging

Product shall be packaged to prevent damage during shipping, handling, and storage.

Product shall be packaged as described in Section 7.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

Each shipping container shall be legibly marked with the following information:

- SCL purchase order number

6. Issuance

Stock unit: See Section 7.

7. Approved Manufacturers

| Stock No. | Stock Unit | Description | Manufacturers | |
|-----------|------------|--|------------------------|--------------------------------|
| | | | Ideal Industries, Inc. | American Polywater Corporation |
| 726223 | BG | Plastic bag, 1/2-gallon | – | J-55 |
| 726226 | GL | Plastic jug, pourable version, 1-gallon | 31-421 | PJ-128 |
| 726227 | PL | Plastic pail, pourable version, 5-gallon | 31-425 | PJ-640 |

8. Sources

Shetab, Muneer; SCL Standards Engineer, originator, and subject matter expert for 7515.45.

SCL Material Standard 7262.2; “Lubricants, Cable-Pulling” (canceled)

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www.polywater.com

www.idealind.com