



WLW Wire Pulling Lubricant Wintergrade



Data Sheet

1. Product Description

3M™ WLW Pulling Lubricant Wintergrade is a translucent green polymer gel used for wire and cable pulling. WLW is a version of 3M™ WL gel lubricant which has been modified for use in colder climates. The lubricant is easy to handle and apply. The gel material is non-staining and affords quick and easy cleanup. Low solids content means less conduit blocking if additional pulls are required. The 3M Wire Lubricant is available in four sizes.

WL-QT	1 qt. squeeze bottle
WL-1	1 gallon pail
WL-5	5 gallon pail
WL-55	55 gallon drum (special order)

WLW Wire Pulling Lubricant Wintergrade Features:

- CSA Certified File LR108775
- Application range down to 10°F.
- Versatile (compatible with a wide range of of cable types and jacket materials).
- Temperature stable. The lubricant can endure freezing and high temperature storage conditions and will not phase separate.
- Non-staining and is easy to cleanup.
- Excellent lubricity.
- Low solids content. < 3.5% solids.
- Does not contain any wax, grease or silicone.

2. Applications

3M Wire Pulling Lubricant is suitable for pulling many cable types, such as power, control, instrumentation and coaxial cables. This lubricant is compatible with cable jacket materials and semi-cons.

3. Data: Physical Properties

Color:	Thixotropic translucent green gel
Percent solids:	2.5-3.5%
pH:	6.5-8.5
Temperature use range:	10°F - 110°F
Temperature stability:	< 10% change in Brookfield viscosity from 40°F to 100°F. No separation after five freeze/thaw cycles or 24 hours at 120°F.
Polyethylene Stress Cracking:	None / ASTM D1693
Compatible with conductive polymeric insulation's shields and jackets	IEEE P1026

4. Specifications

Product

The lubricant shall be a polymer gel capable of use from 10°F to 110°F and storage at subfreezing or high temperature warehouse conditions without phase separation. The WLW lubricant must have excellent lubricity and provide low tension when pulling cable. It must have no adverse affects on the physical or electrical properties of cable jackets or semi-conducting shielding material. The lubricant must be translucent green and non-staining. Lubricant shall be CSA Certified.

Engineering/Architectural

The wire pulling lubricant shall be WLW Wire Pulling Lubricant Wintergrade. The lubricant shall be a polymer gel type material and must be compatible with cable jacketing materials and semi-con. The lubricant must be translucent green and non-staining. The lubricant shall be unaffected by normal warehouse storage conditions.

5. Installation Techniques

The lubricant needs to reach all points where the cable and conduit rub together to obtain optimum tension reduction. Normal application is by wiping on the cable jackets as the cable is pulled into the conduit. The cable will generally carry enough lubricant to complete an average pull. If cable pulls are long or difficult, inject the lubricant directly into the conduit and spread ahead of the cable in addition to wiping on the jackets.

The amount of lubricant needed can vary greatly depending on the difficulty of the pull. A general formula to determine application rates for a normal pull is:

$$\text{Quantity (gallons)} = .0015 \times L \times D$$

L = length of pull in feet

D = diameter of conduit in inches (approximately 3/4 gallon per 100 ft. of 5" conduit).

6. Maintenance

3M™ WLW Wire Pulling Lubricant Wintergrade is unimpaired by normal warehouse storage conditions. Opened containers should be tightly resealed to prevent evaporation of the material.

7. Availability

WLW Wire Pulling Lubricant Wintergrade is available in 1 quart squeeze bottles or 1 and 5 gallon pails from your local authorized 3M electrical distributors. Fifty-five gallon drums may be special ordered.

Material Safety Data Sheets (MSDS) are available from 3M or your electrical distributor.

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IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

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Electrical Products Division

6801 River Place Blvd.
Austin, TX 78726-9000
www.3M.com/elpd

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