

# Polywater® Communication Gel Lubricant Type CGL

POLYWATER® Lubricant CGL is a high performance, **gel** cable pulling lubricant formulated specifically for the communications industry. It is recommended for fiber optic, copper or coaxial cable pulls.

POLYWATER® Lubricant CGL provides maximum friction reduction between cable and conduit under both low and high sidewall bearing pressures. It is slow-drying and leaves a lubricating film after its water base has evaporated. Polywater® CGL is a gel material and can be applied by hand or using Polywater's LP Pumps.

POLYWATER® Lubricant CGL meets California regulation CCR 22. Polywater® CGL is suitable for use on PE and low-smoke zero-halogen (LSZH) communication cable jackets.



## Product Benefits

- Superior friction reduction
- Effective lubrication when dry
- High cling factor
- Compatible with cable jackets—including fire-rated, plenum
- Clean and non-staining

## Friction Testing

Friction is measured using the method described in the white paper, “Coefficient of Friction Measurement on Polywater’s Friction Table, 2007” ([polywater.com/FTable.pdf](http://polywater.com/FTable.pdf)). Values are averages based on cable jacket and conduit materials from multiple manufacturers. Typical friction coefficients at 200 lbs/ft (2.91 kN/m) normal pressure are shown.

### Coefficient of Friction for POLYETHYLENE Jacket Cable

<u>Conduit Type</u>	<u>Typical Value</u>
HDPE	.04
PVC	.05

## Environmental Testing

POLYWATER® Lubricant CGL is safe in the aquatic environment and passes CCR Title 22 Fathead Minnow Hazardous Waste Screen Bioassay.

<u>Product</u>	<u>Result</u>
POLYWATER® Lubricant CGL:	PASS (LC <sub>50</sub> > 750 mg/L)

## Compatibility

### Polyethylene Stress Cracking:

POLYWATER® Lubricant CGL does not stress crack polyethylene jackets commonly used on communications cables. MDPE and HDPE jacket materials were tested according to ASTM standard method<sup>2</sup>. After 168 hours exposure none of the test specimens showed failures.

<sup>2</sup> ASTM Test Method D1693, *Environmental Stress-Cracking of Ethylene Plastics*.

## Properties

### Appearance:

Opaque-white stringy gel. Light gel viscosity (35,000 -50,000 cps @ 10rpm). Neutral pH (6.5 – 7.5).

### Coatability:

*Coatability is a measure of the lubricant's ability to coat the jacket as a thin film for continued lubricity on longer pulls.*

POLYWATER® Lubricant CGL will wet out evenly on cable jacket surfaces. It will not bead up or rub off of the jacket sample. A one-inch (25 mm) diameter XLPE cable dipped six inches (152 mm) into Polywater® Lubricant LZ, then withdrawn and held vertically, will retain at least 25 grams of Polywater® Lubricant LZ for one minute at 70° F (21° C).

### Combustibility:

Lubricant has no flash point and dried residue is non-flammable.

### Temperature Use Range:

Communication Gel Lubricant CGL:  
20°F to 120°F (-5°C to 50°C)

Wintergrade Lubricant, WCGL  
-20°F to 120°F (-30°C to 50°C)

### Temperature Stability:

No phase-out after five freeze/thaw cycles or 5-day exposure at 120°F (50°C). *Will not phase out or separate during the shelf life of lubricant.*

### Clean-Up:

Non-staining. Complete clean-up with water.

### Storage and Shelf Life:

Store tightly sealed, away from direct sunlight. Lubricant shelf life is one year past the date of manufacture.

## Order Information

<u>Cat #</u>	<u>Package Description</u>
CGL-27	1-quart bag (0.95 liter)
CGL-35	1-quart squeeze bottle (0.95 liter)
CGL-55	½-gallon bag (1.9 liter)
CGL-128	1-gallon pail (3.78 Liter) 4/case
CGL-640	5-gallon pail (18.9 Liter)
	<u>Wintergrade</u>
WCGL-128	1-gallon pail (3.78 Liter) 4/case

American

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Important Notice: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end-user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use.

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