

# Cable Lubricant Selection Guide

American Polywater offers many lubricants for a variety of applications.  
*Which is best for you?*

J

[Polywater® Lubricant J](#) is a clean, slow-drying, water-based, **high-performance gel**. Lubricant J provides maximum tension reduction in all types of cable pulling. It is especially recommended for long pulls and pulls in a hot environment. Lube J dries to form a thin lubricating film that retains its slip for months after use. J is a specification-grade lubricant that does not promote flame propagation when used with fire-retardant cables and systems. It is harmless to humans, environmentally safe, compatible with all common\* cable jacket materials, and can be easily applied as part of the unique Polywater® Lubricant Application System. Patented, UL- and CSA-listed Polywater® J is the premier lubricant in the Polywater® line.

WJ

[Polywater® Lubricant WJ](#) (**winter grade**) is Polywater® J specially formulated for use in temperatures as low as -20°F (-30°C).

PJ

[Polywater® Lubricant PJ](#) is a **pourable** version of the popular Polywater® J. PJ offers the same proven features as Lube J in such key areas as lubricity, cable compatibility, residue fire resistance, and ease of cleanup--yet is easier to apply where pouring is practical.

DB

[Dyna-Blue® Heavy Duty Lubricant](#) is a clean, **easy-to-apply gel**. Its thick "clingability" allows for easy handling and application. Dyna-Blue® combines effectiveness with economy. It is a good lubricant for everyday use in general electrical and telcom applications. Dyna-Blue® is harmless to humans, environmentally safe, UL-listed, compatible with common\* cable jacket materials, and exceptionally easy to work with.

SPY

[Polywater® SPY Lube](#) is an innovative and convenient **spray or wipe** lubricant for all types of electrical wire and cable. The thin liquid can be applied with a saturated wipe, quart squirt bottle, or other higher-volume sprayers. It is compatible with all common\* cable jackets.

WSPY

[Polywater® Lubricant WSPY](#) (**winter grade**) is Polywater® SPY specially formulated for use in temperatures as low as -20°F (-30°C).

FTTx

[Polywater® Lubricant FTTx](#) is a thin liquid for convenient lubrication when pushing or pulling small cables, using a spray or wipe application. Ideal for **fiber drops** in the Last Mile environment, and for **Category 6 data cables** susceptible to the "wet link" insertion loss phenomenon. It is compatible with all common\* cable jackets.

F

[Polywater® Lubricant F](#) is a high-performance, pourable liquid recommended for long, difficult, **fiber optic** cable pulls. It is slow drying and leaves a lubricating film after its water base evaporates. F does not stress crack low density polyethylene. It is compatible with all common\* cable jackets.

WF

[Polywater® Lubricant WF](#) (**winter grade**) is Polywater® F specially formulated for use in temperatures as low as -20°F (-30°C).



[Polywater® LZ](#) is a specification-grade gel lubricant formulated specifically for compatibility\* and high performance with **low-smoke zero-halogen** (LSZH/LSHF) cables. Also available in winter-grade version Type WLZ®



[Polywater® CLR](#) is a transparent lubricant for users who prefer a **crystal clear gel** in electrical and datacom applications.



[Premise Loop™ Lube](#) is a clean, colorless gel formulated specifically for compatibility\* and performance with softer **premise cable** jackets (including PE). The thick gel is suitable for vertical-up runs, and won't stain walls or carpet. Remains temperature stable, won't get thin or runny.



[Network Loop™ Lube](#) is a liquid formulated for the unique requirements of **network cabling**. It is a silicone-enhanced, high performance lubricant recommended for use with all types of communication cable, including copper, fiber optic, and coaxial. This clean, slow-drying pulling compound offers excellent friction reduction and universal compatibility on all common\* communication cable types, including low density polyethylene. It coats evenly and clings well to cable.



[Polywater® Plus Silicone™ Type NN](#) is a clean, slow-drying, **silicone-based** lubricant. Type NN™ offers superior friction reduction and is ideally suited for use with silicone-lined and prelubricated duct. Non-stringy Type NN™ pours and pumps easily, and is compatible with common\* cables. Excellent for pulling through water. Also available in winter-grade version Type WNN™.



[Polywater® Plus Silicone™ Type NB](#) has the same characteristics as Type NN™, but also contains thousands of small, **frictionless rollers**. The rollers have shown additional friction reduction capability in certain long, straight, horizontal pulls of lightweight cable under low sidewall pressure conditions. Also available in winter-grade version Type WNB™.



[Polywater® Lubricant WX](#) is temperature stable **wax-based** pulling lubricant that does not liquefy and drop off cables after high temperature exposure. Polywater® WX Wax Lube is clean and slow drying. It leaves less residue in the conduit to block future cable pulls or removal.



[Prelube® 2000 Cable Blowing Lubricant](#) is a high-performance, pourable liquid recommended for long, difficult, **cable blowing**. It is slow drying and leaves a lubricating film after its water base evaporates. It does not stress crack low density polyethylene. It is compatible with common\* cable jackets.



[Prelube® 5000 Micro-Cable Blowing Lubricant](#) is a high-performance, thin liquid recommended for long, difficult, **microcable blowing**. It is slow drying and leaves a lubricating film after its water base evaporates. It does not stress crack low density polyethylene. It is compatible with common\* cable jackets.



[Polywater® Lubricant A](#) is a clean, clear, water-based, **general purpose liquid** lubricant recommended for short-run horizontal cable pulling. Environmentally safe and non-toxic. **NOTE:** For especially long, hot, or difficult pulls, liquid Polywater® F or PJ is recommended.



[Polywater® Lubricant G](#) is a clean, clear, water-based, **general purpose gel** lubricant recommended for all types of short-run cable pulling, including verticals. Environmentally safe and non-toxic. **NOTE:** For especially long, hot, or difficult pulls, gel-type Polywater® J is recommended.

## Polywater® Lubricant Characteristics Chart

Lube	Color	Liquid or Gel	% Solids	Lowest Temp Usable	Relative Drying Time	Relative String-iness	Product Base	Non-Staining	Universally Cable Compatible*	Temperature Stable	Combustible Dried Residue	Relative Cling-ability
<b>J</b>	White	Gel	3.5 - 5.5%	20°F	Slow	High	Complex Polymer/Water	Yes	Yes	Yes	None	High
<b>WJ</b>	White	Gel	3.5 - 5.5%	-20°F	Slow	High	Complex Polymer/Water	Yes	Yes	Yes	None	High
<b>PJ</b>	White	Liquid	1.7 - 2.3%	20°F	Slow	High	Complex Polymer/Water	Yes	Yes	Yes	None	Medium
<b>DB</b>	Blue	Thick Gel	2.5 - 3.5%	20°F	Moderate	Low	Polymer/Glycol/Water	Yes	Yes	Yes	Minimal	High
<b>SPY</b>	Opaque Yellow	Thin Liquid	3.0 - 4.0%	32°F	Fast**	Low	Complex Polymer/Silicone	Yes	Yes	Yes	None	High
<b>WSPY</b>	Opaque Yellow	Thin Liquid	3.0 - 4.0%	-20°F	Moderate**	Low	Complex Polymer/Silicone	Yes	Yes	Yes	None	High
<b>FTTx</b>	Opaque White	Thin Liquid	3.0 - 4.0%	32°F	Fast**	Low	Polymer/Silicone	Yes	Yes	Yes	Minimal	High
<b>F</b>	Orange	Liquid	3.0 - 4.0%	20°F	Slow	High	Complex Polymer/Water	Yes	Yes	Yes	None	High
<b>WF</b>	Orange	Liquid	3.0 - 4.0%	-20°F	Slow	High	Complex Polymer/Water	Yes	Yes	Yes	None	High
<b>LZ</b>	Opaque White	Gel	3.0 - 4.0%	20°F	Moderate	High	Complex Polymer/Water	Yes	Yes	Yes	None	High
<b>CLR</b>	Clear	Thick Gel	3.0%	20°F	Moderate	Moderate	Complex Polymer Gel	Yes	Yes	Yes	Minimal	High
<b>RL</b>	Clear	Thick Gel	3.0%	20°F	Moderate	Low	Silicone Enhanced Gel	Yes	Yes	Yes	Minimal	Moderate
<b>NL</b>	White	Liquid	2.0%	20°F	Moderate	Moderate	Silicone Enhanced Liquid	Yes	Yes	Yes	Minimal	Moderate
<b>NN</b>	White	Liquid	3.0 - 5.0%	20°F	Slow	Low	Polymer/Silicone	Yes	Yes	Yes	Minimal	Moderate
<b>NB</b>	White	Liquid	5.0 - 7.0%	20°F	Slow	Low	Polymer/Silicone w/Rollers	Yes	Yes	Yes	Minimal	Moderate
<b>WX</b>	Yellow	Gel	4.5 - 6.5%	20°F	Slow	Low	Complex Wax Base	Yes	Yes	Yes	Minimal	High
<b>P</b>	White	Liquid	6.0%	N/A	Slow	Low	Polymer/Silicone	Yes	Yes	Yes	Minimal	N/A
<b>PM</b>	White	Liquid	15 - 20%	N/A	Slow	Low	Polymer/Silicone	Yes	Yes	Yes	Minimal	N/A
<b>A</b>	Clear	Liquid	0.3 - 0.7%	20°F	Fast	High	Simple Polymer/Water	Yes	Yes	Yes	Minimal	Low
<b>G</b>	Clear	Gel	0.5 - 1.5%	20°F	Fast	Moderate	Simple Polymer/Water	Yes	Yes	Yes	Minimal	Low

\*\* Lubricant designed to perform even when dry.

## Polywater® Lubricant Applications Chart

Lube	Application
<b>J</b>	Specification grade. Use for any communications, electrical, CATV, or control cable pull. Especially effective on long, difficult, multi-bend pulls of heavy cable in hot environments. The only proven-safe choice for <a href="#">fire-retardant*</a> cables.
<b>WJ</b>	Winter grade. Same as "J" but for cold weather. Both "J" and "WJ" may be pumped, hand-applied, or used in the <a href="#">Front End Pack™</a> bag system.
<b>PJ</b>	Same as "J" but for horizontal pulls. Pours and <a href="#">pumps</a> more readily, allowing easier dispersion throughout conduit systems.
<b>DB</b>	Formulated for easy hand application. For short- to medium-length pulls of electrical, CATV, data, and communication cable. Ideal for vertical pulls of inside wire.
<b>SPY</b>	Innovative new high-performance, very thin, sprayable formula designed for electrical wire and cable. Spray onto cable or into conduit with choice of three applicators, or apply with available saturated wipes.
<b>WSPY</b>	Winter grade. Same as "SPY" but for cold weather. Both "SPY" and "WSPY" are for spray or wipe application and employ the latest thin-film lubrication technology.
<b>FTTx</b>	High-performance formula designed for " <i>Last Mile</i> " fiber drops. Apply by quart spray or saturated wipe for convenient pulling or pushing of small cables. The saturated wipes are ideal for preventing <a href="#">insertion loss</a> in Cat 6 data cables (also known as "attenuation loss").
<b>F</b>	High-performance, pourable formula designed for fiber optic cable, but suitable for all communication, data, CATV, and electrical types. Pour or use with the <a href="#">LP-D5</a> Automatic Drill Pump.
<b>WF</b>	Winter grade pourable lubricant for optical cables. Same as "F" but specially formulated for use in cold weather temperatures as low as -20°.
<b>LZ</b>	Specification-grade lubricant compatible with low-smoke zero-halogen and low-smoke halogen-free (LSZH/LSHF) cables. <a href="#">Research</a> has shown that most commercially available lubricants are incompatible with LSZH cables.
<b>CLR</b>	Transparent lubricant for users who prefer a crystal clear gel in electrical and datacom applications.
<b>RL</b>	Formulated specifically for softer premise cable jackets. Use for lightweight fiber-optic, coaxial, and other types of premise data cable pulls, especially vertical, inside wiring where wall and carpet stains must be avoided.
<b>NL</b>	Formulated for the unique requirements of network cabling. A silicone enhanced liquid for use with all types of communication cable, including copper, fiber optic, and coaxial (including low density polyethylene).
<b>NN</b>	Contains <a href="#">silicone</a> . Use for the longest, toughest, horizontal pulls of any cable. Suitable for silicone-lined and prelubricated duct. Best choice for water-filled conduits.
<b>NB</b>	Same as "NN" but contains tiny plastic <a href="#">ball bearings</a> . Use for very long, straight pulls of lightweight cable, such as fiber optic cable.
<b>WX</b>	A significant improvement over old-style wax lubes that separate with heat and age. Its high cling factor and water resistance make it an excellent choice for pulling cable through water-filled conduits.
<b>P</b>	Specially formulated to prelubricate conduit before <a href="#">blowing</a> (air-floating), pushing, or pulling cables. Suitable for use with both high air speed (open) and piston (push/pull) type blowing machines.
<b>PM</b>	A very thin, highly concentrated cable blowing lubricant specially formulated to aid the installation of microcables into microtubes.
<b>A</b>	For short, straight, horizontal pulls of any cable type in mild temperatures. Pours and pumps easily. For more difficult pulls, use "F" or "PJ."
<b>G</b>	Use for short, straight pulls of underground cable or inside wire. Pump, hand apply, or use with the <a href="#">Front End Pack™</a> bag system. For more difficult pulls, use "J" or "NN."

\* Contact American Polywater for specific recommendations on [LSZH or LSHF cable jackets](#).

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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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