

DESCRIPTION

QuickKleen[™] Fiber Cleaner is formulated for fast cleaning of high-speed fiber and specialty optics. It quickly penetrates precision parts to lift drywall dust, buffer gel, lint, fingerprints, and oils. The excellent cleaning capabilities of QuickKleen minimize dB losses to maximize optical network performance.

QuickKleen evaporates quickly without residue. The fast-drying character means solvent is not trapped in the connector, which may reduce signal loss. QuickKleen dissipates static and removes surface charge so that the surface is less likely to be re-contaminated. QuickKleen is non-flammable and safe to use.

QuickKleen is packaged in an easy-to-use pump sprayer that allows precise cleaner application to limit waste and contamination. Polywater's non-woven FiberKleen[™] towelettes trap dirt and absorb contaminants from high-speed fiber and optical equipment. A smooth wiping surface and durable material promote easy, effective cleaning.

PERFORMANCE PROPERTIES

QuickKleen is a high-performance optical cleaner. QuickKleen removes a broad variety of endface contaminants.

SOIL TYPE	CLEANING EFFECTIVENESS
Dry/ionic soil (dust, salt)	Excellent
Wet/non-ionic soil (oil, buffer gel)	Excellent
Combination soil	Excellent

QuickKleen has been tested to the rigorous standards of Telcordia GR 2923-CORE, "Generic Requirements for Fiber Optic Connector Cleaning Products."



QuickKleen Fiber Cleaner evaporates quickly without residue.

PRODUCT FEATURES

- **Cleans Fiber Endfaces:** Minimizes signal loss and maximizes connectivity.
- **No Flash Point:** Non-hazardous for air shipment.
- **Cleans Multi-Mode and Single Mode:** Suitable for all glass fiber, including 1625 nm.
- **No Residue:** No streaking, which may block complete light transmission.
- **Evaporates Quickly:** Ready to reinsert or connect immediately after cleaning.

APPROVALS

- Meets Telcordia GR 2923-CORE, "Generic Requirements for Fiber Optic Connector Cleaning Products."
- RoHS and WEEE compliant.

PHYSICAL PROPERTIES

QuickKleen is a high-purity, optical-grade cleaner.

PROPERTY	RESULT
Residue	<100 ppm
Flash point (ASTM D93)	None
Initial boiling point	131°F (55°C)
Specific gravity	1.48
Evaporation rate	Fast

DIRECTIONS FOR USE

QuickKleen is best used with the combination wet/dry cleaning procedure recommended in Telcordia GR 2923-CORE. Non-linting towels (DT-D175), available from American Polywater Corporation, work well with this method.

A light spray of cleaner is placed on the towel. Preferred cleaning motion is in a straight line, drawing the endface through the wetted portion of the towel, and then through a clean portion of a second dry towel. Swabs may be dampened on the wetted portion of the towel in order to clean the alignment adaptor or scope.

APPLICATION PROPERTIES

Temperature Use Range:

20°F to 120°F (-5°C to 50°C)

Storage and Shelf Life:

Keep containers tightly closed when not in use. Shelf life is 2 years.

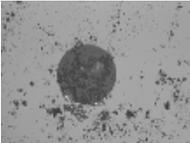
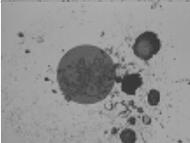
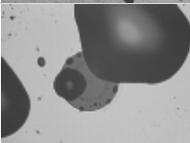
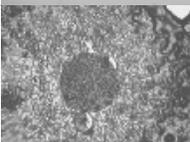
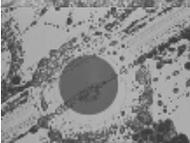
END USE

QuickKleen is an excellent choice for cleaning precision fiber optic components such as:

- Endfaces
- Ferrules
- Single-mode fiber
- Bulkheads
- Multi-mode fiber
- Lenses, mirrors

CLEANING PROPERTIES

QuickKleen removes a broad range of contaminants from fiber connectors. To prove this, reference reflectance and transmitted power is measured on an unsoiled test connector at 1310 nm, 1550 nm, and 1625 nm. Then, the near-end connector plug is removed and soiled according to standard.¹ Connector end adapter is cleaned using recommended procedure. Insertion loss and reflectance are measured and compared to control. An electronic image of each cleaning is recorded.

SOIL	IMAGE—SOILED	IMAGE—1 ST CLEANING
Gypsum		
Carbon black		
Olive oil		
Gypsum/ buffer gel		
Gypsum/ 10W30 oil		

SOIL	INSERTION LOSS	REFLECTANCE
Gypsum	Pass (<0.05 dB loss)	Pass (<2 dB change)
Carbon black	Pass (<0.05 dB loss)	Pass (<2 dB change)
Olive oil	Pass (<0.05 dB loss)	Pass (<2 dB change)
Gypsum/ buffer gel	Pass (<0.05 dB loss)	Pass (<2 dB change)
Gypsum/ 10W30 oil	Pass (<0.05 dB loss)	Pass (<2 dB change)

¹ Tested using methods from Telcordia GR 2923-CORE, "Generic Requirements for Fiber Optic Connector Cleaning Products."

COMPATIBILITY

QuickKleen is compatible with most common plastics and rubbers.

Polycarbonate:

Injection-molded plaques of polycarbonate are cut into bars, 2½ inches by ½ inch. Samples are bent in a three-point fixture. Percent strain is calculated based on the bar thickness and the radius of curvature.

“Strain limit” is the greatest percent strain where no stress cracking occurs. A strain limit greater than 0.5% indicates strain resistance.

Strain Limit >0.5%

QuickKleen shows good compatibility with polycarbonate.

Cladding:

Fiber cladding (Corning Cable) is firmly wiped 5 times with a cleaner-saturated towel. Towel and cable are visually inspected for cladding transfer or damage.

Cladding shows no visible damage.

QuickKleen shows good compatibility with fiber cladding.

ENVIRONMENTAL IMPACT

PROPERTY	RESULT
VOC content	67 grams/liter
Global warming potential	310
Ozone depletion potential	None
CFC, HCFC, HFC content	None
RCRA	Not regulated as hazardous waste
CERCLA/SARA status	Not regulated as a hazardous substance
RoHS and WEEE	Compliant
REACH	Compliant

SAFETY

QuickKleen has minimal toxicity and contains no listed carcinogens. Good industrial hygiene practice and appropriate precautions should be employed during use. See SDS for specific details.

PACKAGING

QuickKleen is packaged in a safety sealed container that resists spills, leaks, and contamination. The 2 fluid ounce spray bottle can be used to clean 500 times.

Non-Linting Towels:

FiberKleen Dry Towels offer high absorbency and are made from non-linting, non-fraying, ultra-clean material. This specialty, nonwoven fabric is engineered for optimum particle entrapment. The durable towel has a smooth surface for easy cleaning. It meets Telcordia Specification.



SOAK TESTING

Materials are immersed in QuickKleen for an hour at 50°C (122°F). Rubbers may swell slightly but will return to their original state once the cleaner evaporates.

PLASTIC	COMPATIBILITY
Nylon 66	Excellent
Polycarbonate	Excellent
Polyethylene (HDPE)	Excellent
Polyethylene (LDPE)	Excellent
PVC	Excellent
RUBBER	COMPATIBILITY
Silicone rubber	Excellent
EPDM	Excellent

MODEL SPECIFICATION

The statement below may be inserted into a customer specification to help maintain engineering standards and ensure work integrity.

The fiber cleaner shall be effective on both ionic and non-ionic soils. It shall meet the cleaning criteria of Telcordia GR 2923-CORE, "Generic Requirements for Fiber Optic Connector Cleaning Products." It shall contain an oxygenated solvent component for static dissipation.

The cleaner shall be fast evaporating and non-flammable. It shall leave minimal residue of less than 100 ppm. The cleaner shall be compatible with fiber optic components. It shall not stress-crack polycarbonate and shall have a strain limit greater than 0.5%.

The cleaner shall not contain an aerosol propellant. It shall be packaged in a plastic bottle that allows cleaner to be dispensed in a fine mist spray pattern.

ORDER INFORMATION

CAT #	PACKAGE DESCRIPTION
QC-2LP	2-oz QuickKleen Fiber Cleaner with finger sprayer
DT-D175	175-count dispenser pack of non-linting towelettes with cleaning pad

CONTACT US

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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.

American Polywater expressly disclaims any implied warranties and conditions of merchantability and fitness for a particular purpose. American Polywater's only obligation shall be to replace such quantity of the product proven to be defective. Except for the replacement remedy, American Polywater shall not be liable for any loss, injury, or direct, indirect, or consequential damages resulting from product's use, regardless of the legal theory asserted.

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