

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name:
Type FO™ Fiber Optic Cleaner/Degreaser

Product ID numbers: FO-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Fiber and precision cleaning

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation

11222 - 60th Street North

Stillwater, MN 55082 USA

Tel: 1-651-430-2270

Email: sds@polywater.com

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to USA OSHA 29 CFR 1910.1200 (2012) and Canada HPR (SOR/2015-17; WHMIS 2015).

Flam Liq 2 H225

Eye Irrit. 2A H319

STOT SE 3 H336

2.2 Label elements

Contains: Isopropanol



Pictograms:

Signal word: Danger

Hazard Statements:

H225 Highly flammable liquid and vapor

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

Precautionary Statements:

P210 Keep away from sparks, flames and hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground, bond container and receiving equipment.

P242 Use only non-sparking tools.

- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing vapor.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303 + P361 + P353 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical attention.
- P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local and national regulations.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>
Isopropanol	67-63-0	200-661-7	100

4. First Aid Measures

4.1 Description of first aid measures

- Eye Contact:** If eye irritation from exposure to vapors develops, move to fresh air. Flush eyes with clean water. If irritation persists, seek medical attention. For direct eye contact, flush with large quantity of water for 15 minutes. Seek medical attention.
- Skin Contact:** Remove contaminated clothing; flush skin thoroughly with water. If irritation occurs, seek medical attention.
- Inhalation (Breathing):** If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention. If breathing is difficult, provide oxygen. If not breathing, give artificial respiration. Seek immediate medical attention.
- Ingestion (Swallowing):** Do not induce vomiting or give anything by mouth unless directed to do so by medical personnel. Get medical attention if symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 for more information.

4.3 Indication of immediate medical attention and special treatment needed.

Causes serious eye irritation.

5. Firefighting Measures

5.1 Extinguishing media:

Carbon dioxide, water fog, dry chemical or foam.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition and by-products:

Burning generates carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Wear appropriate, protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. Sealed container can build up pressure when exposed to high heat. Use water spray to cool fire exposed containers.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Keep away from heat/sparks/open flames/hot surfaces. No smoking. For a spill in a confined space, provide mechanical ventilation to disperse or exhaust vapors. For emergency responders: use respiratory protection: half-face or full-face respirator with filter(s) for organic vapor for spills in a confined space. Chemical goggles are recommended if splashes or contact with eyes is possible. For small spills: normal antistatic work clothes are usually adequate.

6.2 Environmental precautions:

Avoid release to the environment. Dyke the spill to prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Remember, adding an absorbent material does not change the toxicity or flammability hazard.

6.4 Reference to other sections:

Refer to Sections 4, 5, 8, and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing vapors or spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use only outdoors or in a well-ventilated area. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store away from acids and oxidizing agents.

7.3 Specific end uses

See technical data sheet on this product for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure limits and recommendations:

Isopropanol, 2-propanol (67-63-0)

Country/Source	Long-term exposure limit – 8 hr. TWA	Short-term exposure limit – 15 min
USA, OSHA NIOSH	980 mg/m ³ , 400 ppm	1,225 mg/m ³ , 500 ppm
USA, ACGIH	200 ppm	400 ppm
British Columbia	200 ppm	400 ppm
Alberta	492 mg/m ³ , 200 ppm	984 mg/m ³ , 400 ppm
Quebec	985 mg/m ³ , 400 ppm	1,230 mg/m ³ , 500 ppm
Saskatchewan*	200 ppm	400 ppm

* Manitoba, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island are all based on the current ACGIH TLVs. New Brunswick is based on an older version ACGIH. Nunavet and Northwest Territories are based heavily on current ACGIH TLVs.

8.2 Exposure controls

Respiratory protection:

Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Use a respirator or gas mask with cartridges for organic vapors (NIOSH-approved) or use supplied air equipment.

Protective gloves:

For repeated or prolonged skin contact, the use of impermeable gloves is recommended to prevent drying and possible irritation.

Suggested Material: Nitrile Rubber
Suggested Thickness: For short term contact (<15 minutes), splashes use 0.2 mm. For full contact use 0.4 mm

Nitrile, minimum 0.38 mm thickness or comparable protective barrier material with a high performance level for continuous contact use conditions, permeation breakthrough minimum 480 minutes in accordance with CEN standards EN 420 and EN 374.

Eye protection:

Safety glasses recommended.

Other protective equipment:

It is suggested that a source of clean water be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:	Clear, colorless liquid; typical alcohol odor.
Odor threshold:	22 ppm
pH:	Does not apply
Freezing point:	-130°F / -90°C
Boiling point:	180°F / 82°C
Flash point:	55°F / 13°C (TCC)
Evaporation rate:	1.7 (n-butyl acetate = 1)
Flammability (solid, gas):	Not applicable to liquids
Upper/lower flammability or explosive limits:	LEL: 2% UEL: 12.7%
Vapor pressure:	4.4 kPa @20°C
Vapor density (Air = 1):	2.07 (Air = 1)
Specific gravity (H₂O = 1):	0.79
Solubility in water:	Complete
Coefficient of Water/Oil Distribution:	0.1 This product is equally soluble in oil and water.
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

9.2 Other Information

Volatiles (Weight %):	100%
VOC Content:	790 g/l

10. Stability and Reactivity

10.1 Reactivity:

See remaining headings in Section 10.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

Avoid heat, flame, and sparks.

10.5 Incompatible materials :

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Carbon dioxide, carbon monoxide.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact may cause eye irritation. This irritation is minimal and expected to be transient.

Skin contact:

Prolonged or repeated skin exposure can remove oils, causing redness, drying and cracking. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material.

Irritation and Sensitization Potential:

Product may be irritating to skin and eyes. It is not a sensitizer.

Inhalation (Breathing):

Concentrated solvent vapors may cause irritation of the nose and throat. Prolonged exposure to excessively high vapor concentrations can result in central nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue).

Ingestion:

Ingestion of large quantities may cause irritation of the digestive tract, nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue).

Toxicity to Animals:

Isopropyl Alcohol	LD ₅₀ (oral rat) 5000 mg/kg
	LD ₅₀ (dermal rabbit) 12800 mg/kg
	LC ₅₀ (inhl rat) 12000, 8 hours

Chronic Exposure:

Reproductive Toxicity: Not classified as a reproductive system toxin.

Mutagenicity: Not classified as a mutagen.

Teratogenicity: Not classified as teratogenic or embryotoxic.

Specific Target Organ Toxicity (STOT) No end point data.

Toxicologically Synergistic Products: Not available.

Carcinogenic Status: This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC, or OSHA, nor have any of its components.

12. Ecological Information

12.1 Toxicity:

Ecotoxicity: No information available.

Aquatic Toxicity:

Fish (acute) 96 h LC₅₀ Fathead Minnow > 1000 µl/l
48 h LC₅₀ Golden Orfe 8970 - 9280 mg/l

Aquatic crustacea (acute) 96 h LC₅₀ Daphnid > 1000 µl/l

12.2 Persistence and degradability: No information available

12.3 Bioaccumulation potential: No information available

12.4 Mobility in soil: No information available

12.5 Results of PBT and vPvB Assessment: This product is not, nor does it contain a substance that is a PBT or vPvB.

12.6 Other adverse effects: None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

US DOT Domestic Ground

Transportation: Isopropyl Alcohol LTD QTY, (packages FO-2LP, FO-8LF, FO-16, FO-16C, FO-32)
 Isopropyl Alcohol, (packages FO-128, FO-128C)

UN Number: 1219

UN Proper shipping name: Isopropyl Alcohol LTD QTY, (packages FO-2LP, FO-8LF, FO-16, FO-16C, FO-32)
 Isopropyl Alcohol, (packages FO-128, FO-128C)

Transport hazard class(es): Class 3

Packing group: II

Environmental hazards: None known

Special precautions: None known

ICAO/IATA-DGR: Isopropyl Alcohol LTD QTY, (packages FO-2LP, FO-8LF, FO-16, FO-16C, FO-32)
 Isopropyl Alcohol, (packages FO-128, FO-128C)

IMDG: Isopropyl Alcohol LTD QTY, (packages FO-2LP, FO-8LF, FO-16, FO-16C, FO-32)
 Isopropyl Alcohol, (packages FO-128, FO-128C)

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

USA Federal and State

All components are listed on the TSCA inventory.

Hazard Categories for SARA Section 311/312 Reporting	<u>Acute</u> Yes	<u>Chronic</u> No	<u>Fire</u> Yes	<u>Pressure</u> No	<u>Reactive</u> No
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<u>Components</u>	<u>CERCLA/SARA Sec 302 Hazardous Substance RQ</u>	<u>EHS TPQ</u>	<u>SARA Sec. 313 Toxic Release</u>
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Components are not affected by these Superfund regulations.

NFPA Ratings:

Health:	1
Fire:	3
Reactivity:	0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

California Proposition 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm or has been assessed to be below OEHHA Safe Harbor exposure levels required for labeling.

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list ≥ 0.1% SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Canada

All components are listed on the DSL inventory.

This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Australia

All components are listed on the AICS.
Hazardous according to criteria of NOHSC Australia.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration
CLP = Classification, Labeling and Packaging Regulation
STOT = Specific Target Organ Toxicity
LD₅₀ = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)
AICS = Australian Inventory of Chemical Substances

Mixture classification according to Regulation (EC) No 1272/2008:

H225 Highly flammable liquid and vapor
H319 Causes serious eye irritation
H336 May cause drowsiness or dizziness

Classification Procedure

Calculation method.
Calculation method.
Calculation method.

Revision Date: September 21, 2018
Revision Number: 7 NA
Supersedes: August 3, 2017
Other: Not Applicable
Indication of Changes: Section 3, 15 updated; format updates and additional California Proposition 65 information. Written in accordance with the provisions of OSHA 1910.1200 App D (2012) and Canada HPR (SOR/2015-17) (WHMIS 2015). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.