Revision Date: January 2, 2015 Revision Number: 5 supersedes 4

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: Type FC[™] Fiber Test Cleaner

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

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses:Precision cleaningList 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

Polywater Europe BV Zuidhaven 9-11 Unit B2 4761 CR Zevenbergen

Netherlands

Tel: +31 (0)10 2330578 Email: sds@ polywater.com

1.4 Emergency telephone numbers

INFOTRAC 1-352-323-3500 (USA)

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to OSHA 29 CFR 1910.1200 and Regulation (EC) No 1272/2008.

Asp Tox 1 H304 Skin Irrit 2 H315 Eye Irrit 2B H319 Acute Tox 4 H332 Flam Lig 4 H227

2.2 Label elements

Contains: Petroleum distillates, hydrotreated light; 2-Butoxyethanol





Pictograms:

Signal word: Danger

Hazard Statements:

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation
H319 Causes eye irritation
H332 Harmful if inhaled
H227 Combustible liquid

Precautionary Statements:

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

P280 Wear protective gloves.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P302 + P352 If on skin: Wash with plenty of water. P332 + P313 If skin irritation occurs: Get medical attention P305 + P351 + If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if P338 present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention. P261 Avoid breathing fumes. P304 + P340 If inhaled: remove person to fresh air and keep comfortable for breathing. P403 + P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

Component	CAS#	<u>EC #</u>	<u>Wt. %</u>	GHS/CLP Classification Asp. Tox. 1 H304;
Medium Aliphatic				EUH066 Skin Irrit. 3 H316;
Petroleum Solvent	64742-47-8	265-149-8	< 100	Flam Liq 4 H227
2-Butoxyethanol	111-76-2	203-905-0	< 10	Acute Tox 4 H302, H312, H332; Skin Irrit 2 H315; Eye Irrit 2 H 319

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. If victim is drowsy or

unconscious, place on the left side with head down. Do not leave victim

unattended. Seek medical attention.

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.

Aspiration hazard. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis.

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 CO, CO₂ and smoke. Smoke may be acrid and fumes irritating.

5.3 Advice for firefighters

Wear full 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. Use only non-sparking tools to clean up the spill. 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. Work gloves that are resistant to aromatic hydrocarbons are recommended. 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. For industrial or professional use only. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

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:

Component Name	Limit	Standard	Source/Note
Medium Aliphatic Petroleum Solvent	100 ppm	ACGIH TWA	United States
Medium Aliphatic Petroleum Solvent	500 ppm	OSHA TWA	United States
Medium Aliphatic Petroleum Solvent	1200 mg/m3	RCP* TWA	ACGIH, Manufacturer
2-Butoxyethanol	20 ppm	ACGIH TWA	United States
2-Butoxyethanol	50 ppm	OSHA TWA	United States

^{*}reciprocal calculation procedure for total hydrocarbons

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.

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.

Odor threshold:

pH:

Does not apply

Freezing point:

-58°F (<-50°C)

Boiling point:

365°F (185°C) Initial

Flash point: >140°F (>60.5°C), Closed Cup (PMCC)

Evaporation rate: <0.1 (n-butyl acetate = 1) **Flammability (solid, gas):** Not applicable to liquids

Upper/lower flammability or

explosive limits: LEL = 0.7% UEL = 6.1%-7.0% Vapor pressure: <1 mm Hg < 134 Pa @ 20°C

Vapor density (Air = 1): Not available

Specific gravity ($H_2O = 1$): 0.80

Solubility in water: Not available

Partition coefficient: n-

octanol/water:Not availableAuto-ignition temperature:Not availableDecomposition temperature:Not availableViscosity:Not available

9.2 Other Information

Volatiles (Weight %): 100% VOC Content: 800 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 petroleum 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). Persons with impaired lung function may experience additional breathing difficulties due to the irritant properties of this material.

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:

Medium Aliphatic

PetroleumSolvent: LD₅₀ (oral rat) >5000 mg/kg

 LD_{50} (dermal rabbit) >2000 mg/kg LC_{50} (inhl rat) >4.3mg/L, 4 hours

2-Butoxyethanol: LD₅₀ (oral rat) >5000 mg/kg

LD₅₀ (dermal rabbit) >3000 mg/kg LC₅₀ (inhl dog, guinea pig) >2mg/l, 7 hr

Aspiration hazard

May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.

Chronic Exposure:

Reproductive Toxicity: Not available.

Mutagenicity: Not available.

Teratogenicity: Not available.

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 Aquatic Toxicity:

2-Butoxyethanol (acute): 96 h LC₅₀ Bluegill 1,490 mg/l

96 h LC₅₀ Silverside Minnow 1,250 mg/l 48 h EC50 Water Flea 1,550 mg/l 21 d NOEC Zebra Fish > 100 mg/l 21 d NOEC Daphnid 100 mg/l

12.2 Persistence and degradability: Expected to be biodegradable.

12.3 Bioaccumulation potential:No information available12.4 Mobility in soil:No information available.

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

Assessment: vPvB.

2-Butoxyethanol (chronic):

12.6 Other adverse effects: None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

UN Number: Not Listed **UN Proper shipping name:** Not Applicable Transport hazard class(es): Not Applicable Packing group: Not Applicable **Environmental hazards:** None known Special precautions: None known TDG: Not Regulated ICAO/IATA-DGR: Not Regulated IMDG: Not Regulated ADR/RID: Not Regulated

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	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Pressure</u>	Reactive
Section 311/312 Reporting	Yes	No	Yes	No	No

CERCLA/SARA Sec 302 SARA Sec. 313
Components Hazardous Substance RQ EHS TPQ Toxic Release

Components are not affected by these Superfund regulations.

NFPA Ratings: Health: 1

Fire: 2 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.

European Union

All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

Canada

All components are listed on the DSL inventory.

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

WHMIS Classification: B3

Australia

All components are listed on the AICS.

Hazardous according to criteria of NOHSC Australia. Product classified as harmful (Xn).

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

Hazard Statements:

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation
H319 Causes eye irritation
H332 Harmful if inhaled
H227 Combustible liquid

Revision Date: January 2, 2015

Revision Number: 5

Supersedes: November 25, 2014 **Other:** Not Applicable

Indication of Changes: Section 1, 2, 3, 8, 15, 16 updated. Addition of acronyms and other formatting changes.

Updated in accordance with the provisions of OSHA 1910.1200 App D and REACH

Annex II (EU No 453/2010). (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.