

SAFETY DATA SHEET

Issuing Date: 18-Sep-2014

Version 2

Flushing Solution

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Flushing Solution

Product code QU-016

Product Use Printhead cleaning solution.

Manufactured by
FUJIFILM Manufacturing U.S.A., Inc.
20 West 14th Avenue
North Kansas City, MO. 64116 USA
Phone#: (913) 342-4060

Distributed in Canada by
FUJIFILM Canada, Inc.
600 Suffolk Ct.
Mississauga, Ontario L5R 4G4

MSDS are available at the following website(s): <http://www.fujifilmusa.com/msds>
<http://www.fujifilm.ca/msds/search.do>

Company Phone Number U.S.A: 800-473-3854 Canada: 800-263-5018

Emergency Telephone Transport-CHEMTREC Inside NA: 800-424-9300
Transport CHEMTREC Outside NA: 703-527-3887
Transport-CANUTEC Inside Canada: 613-996-6666
Medical Emergency (24 hour): 877-935-7387

E-mail EHS@fujifilm.com

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Flammable liquids	Category 4

GHS Label elements, including precautionary statements

Warning

Hazard Statements

Harmful if swallowed
Harmful in contact with skin
Combustible liquid



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Response

Specific measures (see .? on this label)
 IF ON SKIN: Wash with plenty of soap and water
 Call a POISON CENTER or doctor/physician if you feel unwell
 Wash contaminated clothing before reuse
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not classified

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
2-butoxyethyl acetate	112-07-2	80-100%

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice

Do not get in eyes, on skin, or on clothing. If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. Consult a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

None known.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Combustible liquid. May be ignited by heat, sparks or flames.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge Yes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges. Use personal protective equipment. Pay attention to flashback. Use only non-sparking tools. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes or clothing. Wear personal protective equipment. Avoid breathing vapors or mists. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
2-butoxyethyl acetate	TWA: 20 ppm		TWA: 5 ppm TWA: 33 mg/m ³	

Exposure controls

Engineering Measures Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	clear	Odor	Solvent
Odor Threshold	Not available	Physical State @20°C	Liquid
pH	Not available	Molecular Weight	Not available
Specific Gravity	0.942	Autoignition temperature	Not available
Flash point	160 °F / 71 °C	Boiling point / boiling range	378 °F / 192 °C
Decomposition temperature	Not available	Freezing Point	Not available
Melting point / melting range	Not available		
Flammability Limit in Air			
upper	8.5		
Lower	0.9		

Oxidizing Properties	Not available	Explosive Property Details	Not available
Solubility	Not available	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	0.039 mm/Hg @ 20 C
Vapor density	Not available	Density	Not available
Weight per Gallon (lbs)	7.84	Actual VOC (lb/gal)	7.84
VOC (lb/gal)	Not available	VOC (g/l)	Not available
Dynamic viscosity	Not available		

VOC Content of Material 940 grams per liter
VOC Content of Coating less Water and Exempt Solvents 940 grams per liter

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization does not occur.

Conditions to Avoid

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Heat, flames and sparks.

Incompatible Materials

Strong oxidizing agents, strong acids, and strong bases. Strong oxidizing agents.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

Inhalation

May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. May be harmful if inhaled.

Eyes

Contact with eyes may cause irritation.

Skin

May be absorbed through the skin in harmful amounts. May cause irritation.

Ingestion

May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
2-butoxyethyl acetate	= 1600 mg/kg (Rat)	= 1480 mg/kg (Rabbit)	

Information on toxicological effects

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Non-irritating during normal use.
Corrosivity No information available.
Sensitization No information available.
Mutagenic Effects No information available.
Reproductive Toxicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-butoxyethyl acetate	A3			

ACGIH: (American Conference of Governmental Industrial Hygienists)
 A1 - Known Human Carcinogen
 A2 - Suspected Human Carcinogen
 A3 - Animal Carcinogen
 A4 - Not Classifiable as a Human Carcinogen
NTP: (National Toxicity Program)
 Known - Known Carcinogen
 Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

IARC: (International Agency for Research on Cancer)
 Group 1: Carcinogenic to humans
 Group 2A: Probably carcinogenic to humans
 Group 2B: Possibly carcinogenic to humans
 Group 3: Not classifiable as to its carcinogenicity to humans

OSHA: (Occupational Safety & Health Administration)
 X - Present

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity May cause adverse liver effects. May cause adverse kidney effects. Hydroxylamine sulfate: May cause methemoglobinemia.
Target Organ Effects Blood, Central nervous system (CNS), Eyes, Hematopoietic System, Kidney, Liver, Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1600 mg/kg
 ATEmix (dermal) 1480 mg/kg

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Octonol Water Partition Coefficient (log pow)
2-butoxyethyl acetate	1.51

Mobility

No information available.

Other adverse effects

 No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261). Dispose of in accordance with all applicable national environmental laws and regulations. Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Yes
DSL/NDSL	Yes
PICCS	Yes
EINECS/ELINCS	Yes
ENCS	Yes
IECSC	Yes
KECL	Yes
AICS	Yes

***Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

***No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS No	SARA 313 - Threshold Values %	Weight-%
2-butoxyethyl acetate	112-07-2	1.0	80-100%

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2-butoxyethyl acetate		X	X	X	

International Regulations

Canada - NDSL

This product does not contain any NDSL chemicals.

Mexico - Grade

Moderate risk, Grade 2

Mexico - Carcinogen Status and Exposure Limits

No information available

Other Regulations

No information available

CPSIA
CONEG

Formulated to comply
 Formulated to comply

ASTM F-963	Formulated to comply
CHPA	Formulated to comply
ROHS	Formulated to comply
REACH/SVHC	Formulated to comply
EN-71	Formulated to comply

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 2	Physical Hazard 0	Personal protection B

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

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Revision Note No information available

Disclaimer **The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

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