

# Culinary

# SDS





# BUTANE FUEL CANISTER

## SAFETY DATA SHEET

Prepared to U.S. OSHA, ANSI, Canadian WHMIS 2015 Standards, and European Directives

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>1.1 Trade Name (as labeled):</b>	Butane Fuel Canister
Synonyms:	None applicable
CAS No:	Mixture
<b>1.2 Product Use:</b>	For use only in portable gas appliances
<b>1.3 Company Name:</b>	Hollowick Inc.
Company Address:	100 Fairgrounds Drive Manlius, NY 13104
Business Phone:	(800) 367-3015
Website:	www.hollowick.com
<b>1.4 Emergency Telephone Number:</b>	Chemtrec: (800) 424-9300

### SECTION 2 - HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** Flammable liquefied gas under pressure. Keep away from heat, sparks, flames, and all other ignition sources. Use only with adequate ventilation.

**Health Hazards:** Inhalation of gas may cause respiratory irritation, drowsiness, and headaches. Contact with liquid may cause freeze burns.

**Flammability Hazards:** This product is a flammable liquefied gas

**Reactivity Hazards:** None.

**Environmental Hazards:** The environmental effects of this product have not been investigated, however release may cause adverse environmental effects.

US DOT Symbols:



EU and GHS Symbols:

Signal Word:

**Danger**

#### 2.1 EU Labeling and Classification:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

**EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:**

**Index Number:** 203-448-7 is Annex VI index # is 601-004-00-0

Substances not listed either individually or in group entries must be self-classified.

**Components Contributing to Classification:** Butane

#### 2.2 Label Elements:

**GHS Hazard Classifications:**

Flammable Gases Category 1  
Gases under pressure (Liquefied Gas)

**Hazard Statements:**

H220 Extremely flammable gas  
H280 Contains gas under pressure, may explode if heated

**Prevention Statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

**Response Statements:**

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 Eliminate all ignition sources if safe to do so.

**Storage Statements:**

P410+P403 Protect from sunlight. Store in well-ventilated place.

**Disposal Statements:**

None Applicable

**2.3 Health Hazards or Risks From Exposure:****Symptoms of Overexposure by Route of Exposure:**

The most significant routes of overexposure for this product are by inhalation. The symptoms of overexposure are described in the following paragraphs.

**Acute:**

**Inhalation:** May cause respiratory tract irritation. May cause headaches, drowsiness, or dizziness.

**Skin Contact:** Gas vapors are not irritating. Freeze burns are possible if skin is in contact with liquid.

**Eye Contact:** Gas vapors are not irritating. Freeze burns are possible if eyes come in contact with liquid.

**Ingestion:** No significant adverse effects are anticipated under normal conditions. Liquid can cause freeze burns

**Chronic:** No data available

**Target Organs:**

Acute: Respiratory

Chronic: No data available

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous Ingredients:	WT%	CAS No.	EINECS No.	Hazard Classification
Butane	95%	106-97-8	203-448-7	Flam. Gas 1, Press. Gas
Dimethyl sulfide	< 0.1%	75-18-3	Not Listed	Not Classified

Balance of other ingredients is miscellaneous hydrocarbons less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

**Note:** All WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format and WHMIS 2015. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250:2000

**SECTION 4 - FIRST AID MEASURES****4.1 Description of First Aid Measures:****Eye Contact:**

If product enters the eyes, flush with plenty of water or eye wash solution for several minutes. Remove contacts if present and easy to do. Seek medical attention if irritation persists.

**Skin Contact:**

Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

**Inhalation:**

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

**Ingestion:**

If product is swallowed, call physician or poison center immediately. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluent's (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

**Medical Conditions Generally Aggravated by Exposure:**

Pre-existing respiratory system problems may be aggravated by prolonged contact.

**4.2 Symptoms and Effects Both Acute and Delayed:**

Exposure to respiratory system may cause irritation.

**4.3 Recommendations to Physicians:**

Treat symptoms and eliminate overexposure.

**SECTION 5 - FIRE FIGHTING MEASURES****5.1 Fire Extinguishing Materials:**

Use the following fire extinguishing materials:

**Water Spray:** Yes  
**Foam:** Yes  
**Halon:** Yes

**Carbon Dioxide:** Yes  
**Dry Chemical:** Yes  
**Other:** Any "C" Class

**5.2 Unusual Fire and Explosion Hazards:**

**Do not extinguish fire until leak is addressed or source is shut off.**

Explosive Sensitivity to Mechanical Impact: Yes

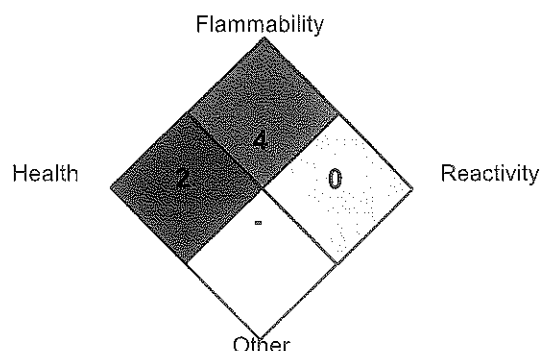
Explosive Sensitivity to Static Discharge: Yes

## BUTANE FUEL CANISTER

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

### 5.3 Special Fire-Fighting Procedures:

#### NFPA RATING SYSTEM



#### HMIS RATING SYSTEM

##### HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	2
FLAMMABILITY HAZARD (RED)	4
PHYSICAL HAZARD (YELLOW)	1

PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic Hazard

## SECTION 6 - ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid breathing vapors and ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

### 6.2 Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Keep out of sewers, storm drains, surface waters, and soils.

### 6.3 Spill and Leak Response:

#### Small Spills:

Collect material via broom or mop. Place in tightly sealed containers for proper disposal.

#### Large Spills:

Approach spill areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling:

To prevent eye contact under the foreseeable conditions of use, wear appropriate safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling.

### 7.2 Storage and Handling Practices:

Contents under pressure. Keep container closed when not in use and store in well ventilated area.

### 7.3 Specific Uses:

For use only in portable gas appliances.

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION****8.1 Exposure Parameters:**

<b>Ingredients</b>	<b>CAS No.</b>	<b>OSHA</b>	<b>ACGIH</b>
Butane	106-97-8	TWA 800 ppm, 1,900 mg/m <sup>3</sup>	TWA 1,000 ppm

**8.2 Exposure Controls:****Ventilation and Engineering Controls:**

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.*

**Respiratory Protection:**

Not required for properly ventilated areas.  
Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

**Eye Protection:**

Safety glasses or goggles are recommended.  
If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**Hand Protection:**

Chemical resistant gloves are recommended to prevent skin contact.  
If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**Body Protection:**

Use body protect appropriate to task being performed.  
If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on Basic Physical and Chemical Properties:**

**Appearance (Physical State and Color):** Clear Liquid

**Odor:** Sulfur (odorant added to aid in the detection of leaks)

**Odor Threshold:** No data available

**pH:** No data available

**Melting/Freezing Point:** No data available

**Boiling Point:** < 35.6 F (2 C)

**Flash Point:** -76 F (-60 C)

**Evaporation Rate:** Not applicable

**Flammability (Solid; Gas):** Extremely Flammable Gas

**Upper/Lower Flammability or Explosion Limits:** 1.9 – 8.5

**Vapor Pressure (mm Hg @ 20°C (68° F):** No data available

**Vapor Density:** Heavier > 1.0

**Relative Density:** No data available

**Specific Gravity:** 0.60

**Solubility in Water:** Not miscible

**Weight per Gallon:** No data available

**Partition Coefficient (n-octanol/water):** No data available

**Auto-Ignition Temperature:** 549 F (287 C)

Decomposition Temperature: No data available

Viscosity: No data available

**9.2 Other Information:**

No data available

**SECTION 10 - STABILITY AND REACTIVITY****10.1 Reactivity:**

This product is not reactive.

**10.2 Stability:**

Stable under conditions of normal storage and use.

**10.3 Possibility of Hazardous Reactions:**

Will not occur.

**10.4 Conditions to Avoid:**

Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture if exposed to heat.

**10.5 Incompatible Substances:**

Strong oxidizing agents.

**10.6 Hazardous Decomposition Products:**

Carbon oxides.

**SECTION 11 - TOXICOLOGICAL INFORMATION****11.1 Information on Toxicological Effects:****Toxicity Data:**

Butane	106-97-8	LC50 – Rat	658,000 mg/mg <sup>3</sup>
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**Suspected Cancer Agent:**

Ingredients within this product are not found on one or more of the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be cancer-causing agents by these agencies.

**Irritancy:**

Respiratory irritant.

**Sensitization to the Product:**

This product is not expected to cause skin sensitization.

**Germ Cell Mutagenicity:**

This product does not contain ingredients that are suspected to be a germ cell mutagenic.

**Reproductive Toxicity:**

This product is not expected to be a human reproductive toxicant.

**SECTION 12 - ECOLOGICAL INFORMATION****12.1 Toxicity:**

No data available

**12.2 Persistence and Degradability:**

No specific data available on this product.

**12.3 Bio accumulative Potential:**

No specific data available on this product.

**12.4 Mobility in Soil:**

No specific data available on this product.

**12.5 Results of PBT and vPvB Assessment:**

No specific data available on this product.

**12.6 Other Adverse Effects:**

No data available

**12.7 Water Endangerment Class:**

At present, there are no Eco toxicological assessments for this product.

**SECTION 13 - DISPOSAL CONSIDERATIONS****13.1 Waste Treatment Methods:**

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of EU Member States and Canada.

**13.2 EU Waste Code:**

Not determined

**SECTION 14 - TRANSPORTATION INFORMATION****14.1 U.S. Department of Transportation (DOT) Shipping Regulations:***This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.***UN Identification Number:**

UN1075

**Proper Shipping Name:**

Petroleum gases, liquefied (contains Butane)

**Hazard Class Number and Description:**

Class 2.1 – Flammable Gas

**Packing Group:**

Not applicable

**DOT Label(s) Required:**

Flammable Gas

**North American Emergency Response****Guidebook Number: 115**

**14.2 Environmental Hazards:**

**Marine Pollutant:**

The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).  
None

**14.3 Special Precaution for User:**

**14.4 International Air Transport Association Shipping**

**Information (IATA):**

This product is considered as dangerous goods.

**14.5 International Maritime Organization Shipping**

**Information (IMO):**

This product is considered as dangerous goods.

**SECTION 15 - REGULATORY INFORMATION**

**15.1 Safety, Health and Environmental Regulations Specific for the Substance or Mixture:**

**United States Regulations:**

**U.S. SARA Reporting Requirements:**

The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

**U.S. SARA 311/312:**

Acute Health: No; Chronic Health: Yes; Fire: Yes; Reactivity: No

**U.S. CERCLA Reportable Quantity**

None.

**U.S. TSCA Inventory Status:**

The components of this product are listed on the TSCA Inventory or are exempted from listing.

**Other U.S. Federal Regulations:**

None known.

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):**

This product does not contain ingredients on the Proposition 65 Lists

**15.2 Canadian Regulations:**

**Canadian DSL/NDSL Inventory Status:**

Components are DSL Listed, NDSL Listed and/or are exempt from listing

**Other Canadian Regulations:**

Not applicable

**Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian WHMIS Classification:**

This product has been classified per WHMIS 2015 standards.

**15.3 European Economic Community Information:**

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details.

**Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**15.4 Australian Information for Product:**

Components of this product are listed on the International Chemical Inventory list.

**15.5 Japanese Information for Product:**

Japanese Minister of International Trade and Industry (MITI) Status: The components of this product are not listed as Class I specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

**15.6 International Chemical Inventories:**

Listing of the components on individual country Chemical Inventories is as follows:

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

U.S. TSCA: Listed



**SECTION 16 - ADDITIONAL INFORMATION****Date of Preparation or Current Review: 06/01/2015**

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. Hollowick Inc. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Hollowick Inc. assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.





## Safety Data Sheet (CARBON OFF)

### 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:..... CARBON OFF

CHEMICAL NAME/

CLASS/SYNONYMS: None

PRODUCT NUMBER: ..... CARBON OFF

UN/NA NUMBER: ..... 1760

CHEMICAL FAMILY: ..... Compounds, Cleaning Liquid

CAS NUMBER: ..... Not applicable for mixtures.

FORMULA: ..... Proprietary

COMPANY:..... JMN Specialties, Inc.

1100 Victory Drive – Westwego, Louisiana USA 70094

Phone (504) 341-3749, Fax (504) 341-5868

[www.jmnspecialties.com](http://www.jmnspecialties.com)

EMERGENCY PHONE: ..... CALL CHEMTEL: Toll Free US & Canada: (800) 255-3924, Outside  
USA +01-813-248-0585. Contract #: MIS0002833.

DATE PREPARED: ..... September 21, 2015

### 2 – HAZARDS IDENTIFICATION

#### GHS HAZARD CLASSIFICATION:

##### Physical Hazards

Flammable Liquids:..... . No hazard statement

##### Health Hazards

Acute Toxicity (Oral): ..... . Category 4 - Harmful if swallowed, in contact with skin, inhaled

Skin Corrosion/Irritation: ..... . Category 2 - Causes skin irritation

Serious Eye Damage/Irritation: Category 1 - Causes severe eye damage

Aspiration Hazard:..... . Category 1 - May be fatal if swallowed and enters airways

#### WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:

##### Pictograms:



SIGNAL WORD:..... DANGER!

#### GHS HAZARD AND PRECAUTIONARY STATEMENTS:

H303 H313 H333: May be harmful if swallowed, in contact with skin or if inhaled

P101+102+103: If medical advice is needed, have product container or label at hand. Keep out of the reach of children. Read label before use.

P202+270+280+281: Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.



## Safety Data Sheet (CARBON OFF)

P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**TOTAL VOC's:** < 2%

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Sodium Hydroxide	8 - 12	1310-73-2
Disodiumtrioxosilicate	1 - 5	6834-92-0
Glycol Ether EB	3 - 7	111-76-2
Anionic/Nonionic Detergent Blend	3 - 7	Confidential

### 4 – FIRST-AID MEASURES

**BREATHING (INHALATION):** Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen.

**SWALLOWING (INGESTION):** Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical attention immediately.

**EYES:** ..... Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

**SKIN (DERMAL):**..... Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

**NOTE TO PHYSICIAN:** ..... All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

### 5 – FIRE-FIGHTING MEASURES

**GENERAL FIRE HAZARDS:** .... Water based blend - Non Flammable

**AUTOIGNITION TEMP:** None - Water based material

**EXTINGUISHING MEDIA:** Determined by surrounding material. In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam.

**SPECIAL FIRE FIGHTING PROCEDURES:** Spilled product on ground may be slippery.



## Safety Data Sheet (CARBON OFF)

### UNUSUAL FIRE AND

**EXPLOSION HAZARDS:** ..... Containers may explode from internal pressure if confined to fire. Cool with water spray.

## 6 – ACCIDENTAL RELEASE MEASURES

**SPILL PROCEDURES:** ..... Wear appropriate personal protective equipment before approaching spill site. For small spills, dilute with water to sewer if allowed by local and state regulations. If unable to wash product with water, absorb with inert material (sand or other approved material) and dispose of in accordance with applicable regulations.

**WASTE DISPOSAL:** ..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**RCRA STATUS:** ..... If discarded in its purchased form, this product is considered a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

## 7 – HANDLING and STORAGE

**STORAGE:** Keep in a tightly closed container, stored in a cool, dry, ventilated area below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be washed out or used for other purposes.

**HANDLING:** ..... Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMITS

HAZARDOUS INGREDIENT	PEL	TLV-TWA
Sodium Hydroxide	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Disodiumtrioxosilicate	None Established	None Established
Glycol Ether EB	40 ppm	40 ppm
Anionic/Nonionic Detergent Blend	None Established	None Established



## Safety Data Sheet (CARBON OFF)



### EXPOSURE CONTROLS:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998.

Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

### PROTECTIVE CLOTHING:

**Eye/face protection:** Wear chemical goggles; face shield (if splashing is possible). **Skin protection:** Chemical resistant, impermeable gloves, impervious full body protection or impervious apron as needed.

Protective Equipment should be tested to determine suitability for prolonged contact.

### ADDITIONAL MEASURES:

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

## 9 – PHYSICAL / CHEMICAL PROPERTIES

**BOILING POINT:** 220°F (104.4°C)  
**FREEZING POINT:** 32°F (0°C)  
**FLASHPOINT:**..... Non-flammable material  
**UPPER FLAME LIMIT (%):** .... NA  
**LOWER FLAME LIMIT (%):** ... NA  
**VAPOR PRESSURE:**..... ND  
**VAPOR DENSITY (AIR=1):**..... > 1  
**SPECIFIC GRAVITY:** ..... 1.014 - 1.15  
**pH:** ..... 13.2 - 13.8  
**SOLUBILITY IN WATER:**..... Complete  
**VOLATILITY**  
**INCLUDING WATER:** 9.50 pounds per gallon  
**MOLECULAR WEIGHT:** ..... No data available (G/MOLE)  
**EVAPORATION RATE:**..... Similar to Water  
**PHYSICAL STATE:** ..... Liquid  
**COLOR:** ..... Purple



## Safety Data Sheet (CARBON OFF)

ODOR:..... Mild Detergent

### 10 – STABILITY and REACTIVITY

STABILITY:..... Stable

HAZARDOUS DECOMP.:..... Will not occur

INCOMPATIBILITY:..... Oxidizers or Oxidizing Materials.

HAZARDOUS REACTIONS: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

### 11 – TOXICOLOGICAL INFORMATION

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**THRESHOLD LIMIT VALUE:..** None Established for this Product

**OSHA PEL:.....** None Established for this Product

**LISTED CARCINOGEN:** This product IS NOT listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

#### MEDICAL CONDITION

**AGGRAVATED:** Existing dermatitis.

#### INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

##### ORAL

**Product:.....** Corrosive, may cause burns to mouth, throat and stomach. Harmful or fatal if swallowed.

##### DERMAL

**Product:.....** Corrosive, may cause skin burns. May cause permanent damage. Harmful contact may not cause immediate pain.

##### INHALATION

**Product:.....** Corrosive, inhalation of mists may cause corrosive effects to nose, throat, and respiratory system.

##### REPEATED DOSE TOXICITY

**Product:.....** No Data Available

##### SKIN CORROSION / IRRITATION

**Product:.....** Repeated and prolonged exposure to concentrated material may cause dermatitis.

##### SERIOUS EYE DAMAGE / IRRITATION

**Product:.....** Corrosive, causes eye burns. May cause permanent damage including blindness without immediate first aid treatment.

##### RESPIRATORY OR SKIN SENSITIZATION

**Product:.....** No Data Available



## Safety Data Sheet (CARBON OFF)

### MUTAGENICITY

#### IN VITRO

Product:..... No Data Available

#### IN VIVO

Product:..... No Data Available

#### Specified Substance(s)

Information as provided by manufacturer

2-butoxyethanol; butyl cellosolve

No Data Available

### CARCINOGENICITY

Product:..... Based on available data the classification criteria are not met. Not classified as hazardous.

### REPRODUCTIVE TOXICITY

Product:..... Based on available data the classification criteria are not met. Not classified as hazardous.

### SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Product: **GENERAL:** This product contains highly alkaline ingredients. **INHALATION:** Exposure to vapor, mist or liquid can cause mild to severe irritation to the respiratory tract, including chemical burns. Severe exposures could result in chemical pneumonia. **EYES:** Contact can cause severe damage including burns and blindness. The severity of the effects depend on concentration and how soon after exposure the eyes are washed. **SKIN:** Brief contact may cause slight to mild irritation with itching and local redness. Prolonged contact may cause more severe irritation, with discomfort or pain, local redness and swelling and possible tissue damage. **INGESTION:** Severe irritant. May cause severe burns of the mucous membranes of the mouth, esophagus, and stomach.

### SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

Product:..... The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin, and respiratory conditions.

### ASPIRATION HAZARD

Product:..... Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.

### OTHER ADVERSE EFFECTS

Product:..... Negligible ecotoxicity

## 12 – ECOLOGICAL INFORMATION

### ACUTE TOXICITY

#### FISH

Product:..... Bluegill sunfish: 48-hour LC50 = 99 mg/L Mosquito fish: 96-hour LC50 = 125 mg/L Brown shrimp (Crangon crangon): 48-hour LC50 = 30 - 100 mg/L

#### AQUATIC INVERTEBRATES

Product:..... Daphnia magna - Water flea: Acute LC50 196 mg/L Marine water.

### CHRONIC TOXICITY

#### FISH

Product:..... Concentrations over 100 mg/L have been reported to kill salmon, trout, carp and crayfish.

#### AQUATIC INVERTEBRATES

Product:..... Expected to have low toxicity:  $10 < LC/EC/IC50 \leq 100$  mg/l





## Safety Data Sheet (CARBON OFF)

### TOXICITY TO AQUATIC PLANTS

Product:..... Freshwater algae are destroyed above pH 8.5.

### PERSISTENCE AND DEGRADABILITY

#### BIODEGRADATION

Product:..... Surfactants in this mixture exhibit biodegradability, under aerobic static laboratory conditions, is high: (BOD20 or BOD28 / THOD greater than 80%).

#### BIOLOGICAL OXYGEN DEMAND

Product:..... No data available

#### CHEMICAL OXYGEN DEMAND

Product:..... No data available

#### BOD / COD RATIO

Product:..... No data available

#### BIOACCUMULATIVE POTENTIAL

Product:..... Sodium hydroxide does not bioaccumulate due to its high solubility in water. It is considered slightly toxic to aquatic organisms unless there is a significant pH shift outside the range of 5 – 10; this change may be toxic to aquatic organisms.

#### MOBILITY IN SOIL

Product:..... Expected to partition to water. The pH effect of sodium hydroxide in water is naturally reduced by the absorption of atmospheric carbon dioxide. This reduction is also effected by dilution with water and by the natural acidity of a given water body. There is no degradation of sodium hydroxide in waters, only loss by absorption or through chemical neutralization.

#### RESULTS OF PBT AND mPvB ASSESSMENT

Product:..... Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bioaccumulative) criteria.

#### OTHER ADVERSE EFFECTS

Product: ..... No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

### 13 –DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** ..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**RCRA STATUS:**..... If discarded in its purchased form, this product is considered a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).



## Safety Data Sheet (CARBON OFF)

### 14 – TRANSPORTATION INFORMATION

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*



**UN/NA NUMBER:** ..... 1760  
**PROPER SHIPPING NAME:** ..... Corrosive Liquid, n.o.s., Contains (Sodium Hydroxide)  
**HAZARD CLASS:** ..... 8  
**PACKAGING GROUP :** ..... II  
**LETTER:** ..... C (Corrosive substances)  
**ENVIRONMENTAL HAZARD:** Because of modern treatment methods or method of use of this product, only an insignificant amount of the ingredients reaches the environment. That amount is at such levels as to typically not cause any adverse effects.  
**REPORTABLE QUANTITY:** ..... 10,190 pounds based on Sodium Hydroxide in mixture.

### 15 - REGULATIONS

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. This SDS complies with 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD). **IMPORTANT:** Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

#### EPA SRA Title III Chemical Listings:

**TSCA STATUS:** ..... This product is listed on the TSCA inventory. If this product is a blend, all ingredients in the product are listed on the TSCA Inventory List. Any impurities present in this product are exempt from listing.  
**SECTION 302:** ..... None  
**SECTION 304:** ..... None  
**SECTION 312:** ..... Yes  
**SARA SECTION 313:** ..... Based on 10,190 lbs. of Sodium Hydroxide in blend, this product is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.10,190.  
**ACUTE:** ..... Yes (Eyes)  
**CHRONIC:** ..... Yes  
**FIRE:** ..... No  
**PRESSURE:** ..... No  
**REACTIVE:** ..... No  
**CLEAN WATER ACT:** ..... Section 311

#### **IMDG – International Marine Dangerous Goods Code**

UN1760, Corrosive Liquid, N.O.S. Contains (Sodium Hydroxide), 8, PG II. EmS F-A, S-B. Marine Pollutant: NO.

#### **IATA**

UN1760, Corrosive Liquid, N.O.S. Contains (Sodium Hydroxide), 8, PG II.

**DEA Chemical Trafficking Act:**.. No



## Safety Data Sheet (CARBON OFF)

### 16 – OTHER INFORMATION

#### HMIS\*

HEALTH		3
FLAMMABILITY		0
REACTIVITY		0
PERSONAL PROTECTION		H

*\*HMIS®HAZARD INDEX: 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard. HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS and product label must be considered.*

ND = No Data, NA = Not Applicable/Not Available, ≤ = Less than or equal to, ≥ = Greater than or equal to

**REVISION STATEMENT:** Changes have been made throughout this Safety Data Sheet (SDS). Please read the entire document. Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) by the Company Health and Risk Assessment Unit.

#### DISCLAIMER:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this Safety Data Sheet (SDS) will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal and State Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.**

\*\*\*This is the last page of this SDS\*\*\*



# SAFETY DATA SHEET

Professional Easy-Off Ready-To-Use Oven &amp; Grill Cleaner Liquid



HEALTH • HYGIENE • HOME

## 1. Product and company identification

**Product name** : Professional Easy-Off Ready-To-Use Oven & Grill Cleaner Liquid

**Distributed by** : Reckitt Benckiser LLC.  
Morris Corporate Center IV  
399 Interpace Parkway (P.O. Box 225)  
Parsippany, New Jersey 07054-0225  
+1 973 404 2600

**Emergency telephone number (Medical)** : 1-800-338-6167

**Emergency telephone number (Transport)** : 1-800-424-9300 (U.S. & Canada) CHEMTREC  
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

**Website:** : <http://www.rbnainfo.com>

**Product use** : Oven Cleaner  
Professional use

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

**SDS #** : 358467PSDS v3.0

**Formulation #:** : 1671-159 (358467 v3.0)

**UPC Code / Sizes** : 62338-80689-1 (64 fl. oz. HDPE Bottle)

## 2. Hazards identification

**Classification of the substance or mixture** : CORROSIVE TO METALS - Category 1  
SKIN CORROSION/IRRITATION - Category 1  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : May be corrosive to metals.  
Causes severe skin burns and eye damage.

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## 2. Hazards identification

### Precautionary statements

- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Wear protective gloves. Wear eye or face protection: Recommended: safety glasses with side-shields. Wear protective clothing. Keep only in original container. Wash hands thoroughly after handling.
- Response** : Absorb spillage to prevent material damage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Store locked up. Store in corrosive resistant container with a resistant inner liner.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : None known.
- Hazards not otherwise classified** : None known.

## 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
potassium hydroxide	2.5 - 5	1310-58-3
disodium metasilicate	1 - 2.5	6834-92-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

## 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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## 4. First aid measures

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : Causes severe burns.
- Ingestion** : May cause burns to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

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## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



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## 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

### Control

#### Occupational exposure limits

Ingredient name	Exposure limits
potassium hydroxide	<b>ACGIH TLV (United States, 4/2014).</b> C: 2 mg/m <sup>3</sup> <b>OSHA PEL 1989 (United States, 3/1989).</b> CEIL: 2 mg/m <sup>3</sup> <b>NIOSH REL (United States, 10/2013).</b> TWA: 2 mg/m <sup>3</sup> 10 hours.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: safety glasses with side-shields

### Skin protection

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## 8. Exposure controls/personal protection

- |                               |  |
|-------------------------------|--|
| <b>Hand protection</b>        | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>        | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Other skin protection</b>  | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b> | : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  |

## 9. Physical and chemical properties

### Appearance

- |   |   |
|---|---|
| <b>Physical state</b>                               | : Liquid. [Translucent Viscous liquid.]                                 |
| <b>Color</b>  | : Colorless.  |
| <b>Odor</b>   | : Ether-like.   |
| <b>Odor threshold</b>                               | : Not available.  |
| <b>pH</b>   | : 14 [Conc. (% w/w): 100%]  |
| <b>Melting point</b>                                | : Not available.  |
| <b>Boiling point</b>                                | : 100°C (212°F)   |
| <b>Flash point</b>                                  | : Closed cup: >93.3°C (>199.9°F) [Product does not sustain combustion.] |
| <b>Evaporation rate</b>                             | : Not available.  |
| <b>Flammability (solid, gas)</b>                    | : Not available.  |
| <b>Lower and upper explosive (flammable) limits</b> | : Not available.  |
| <b>Vapor pressure</b>                               | : Not available.  |
| <b>Vapor density</b>                                | : Not available.  |
| <b>Relative density</b>                             | : 1.05 to 1.08  |
| <b>Solubility</b>                                   | : Easily soluble in the following materials: cold water and hot water.  |
| <b>Partition coefficient: n-octanol/water</b>       | : Not available.  |
| <b>Auto-ignition temperature</b>                    | : Not available.  |
| <b>Decomposition temperature</b>                    | : Not available.  |
| <b>Viscosity</b>                                    | : Dynamic (room temperature): 300 mPa·s (300 cP)                        |

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## 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Keep away from extreme heat. Protect from moisture.
- Incompatible materials** : Reactive or incompatible with the following materials:  
acids  
metals  
Do not mix with household chemicals.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
potassium hydroxide	LD50 Oral	Rat	273 mg/kg	-
disodium metasilicate	LD50 Oral	Rat	1153 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
potassium hydroxide	Eyes - Moderate irritant	Rabbit	-	24 hours 1 milligrams	-
	Skin - Severe irritant	Guinea pig	-	24 hours 50 milligrams	-
	Skin - Severe irritant	Human	-	24 hours 50 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 50 milligrams	-
disodium metasilicate	Skin - Moderate irritant	Guinea pig	-	24 hours 250 milligrams	-
	Skin - Severe irritant	Human	-	24 hours 250 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 250 milligrams	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

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## 11. Toxicological information

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

### Potential acute health effects

- Eye contact : Causes serious eye damage.
- Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact : Causes severe burns.
- Ingestion : May cause burns to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation : No specific data.
- Skin contact : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects : Not available.
- Potential delayed effects : Not available.

#### Long term exposure

- Potential immediate effects : Not available.
- Potential delayed effects : Not available.

### Potential chronic health effects

Not available.

- General : No known significant effects or critical hazards.
- Carcinogenicity : No known significant effects or critical hazards.
- Mutagenicity : No known significant effects or critical hazards.
- Teratogenicity : No known significant effects or critical hazards.

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## 11. Toxicological information

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	4826.3 mg/kg

## 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
potassium hydroxide disodium metasilicate	Acute LC50 80 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Acute EC50 33.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 2320 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Chronic NOEC 160 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

## 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been

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## 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues.  
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	UN3266	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, disodium metasilicate) RQ (potassium hydroxide)	8	II		<u>See DG List.</u>
<b>TDG Classification</b>	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, disodium metasilicate)	8	II		<u>See DG List.</u>
<b>Mexico Classification</b>	UN3266	LIQUIDO CORROSIVO, BASICO, INORGANICO, N.E.P. (potassium hydroxide, disodium metasilicate)	8	II		<u>See DG List.</u>
<b>IMDG Class</b>	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, disodium metasilicate)	8	II		<u>See DG List.</u>
<b>IATA-DGR Class</b>	UN3266	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, disodium metasilicate)	8	II		<u>See DG List.</u>

PG\* : Packing group

## 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
United States inventory (TSCA 8b): Not determined.  
Clean Water Act (CWA) 311: potassium hydroxide

Clean Air Act Section 112 : Not listed  
(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed  
Class I Substances

Clean Air Act Section 602 : Not listed  
Class II Substances

Code # : FF358467  
(358467PSDS)

SDS # : 358467PSDS v3.0 Date of issue : 12/05/2015.

10/13

358467PSDS v3.0

## 15. Regulatory information

DEA List I Chemicals : Not listed  
(Precursor Chemicals)

DEA List II Chemicals : Not listed  
(Essential Chemicals)

### SARA 302/304

#### Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

### SARA 311/312

Classification : Reactive  
Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
potassium hydroxide	2.5 - 5	No.	No.	No.	Yes.	No.
disodium metasilicate	1 - 2.5	No.	No.	No.	Yes.	No.

### State regulations

Massachusetts : The following components are listed: POTASSIUM HYDROXIDE  
New York : The following components are listed: Potassium hydroxide  
New Jersey : The following components are listed: POTASSIUM HYDROXIDE; CAUSTIC POTASH  
Pennsylvania : The following components are listed: POTASSIUM HYDROXIDE (K(OH))

### Label elements

Signal word : DANGER: CORROSIVE  
Hazard statements : CAUSES EYE AND SKIN BURNS. Harmful if swallowed.  
Precautionary measures : Keep out of the reach of children. Contains potassium hydroxide. Do not swallow. Do not get in eyes or on skin or clothing. Wear protective gloves and eye protection. Avoid breathing spray. Use only in a well-ventilated area. Do not mix with household chemicals. Keep from freezing.

## 16. Other information

Hazardous Material :  
Information System (U.S.A.)

Health	3
Flammability	0
Physical hazards	0
Personal protection	D

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

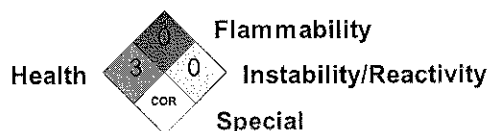
Code # : FF358467 SDS # : 358467PSDS v3.0 Date of issue : 12/05/2015. 11/13  
(358467PSDS)

358467PSDS v3.0

## 16. Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection :  
Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

Date of issue : 12/05/2015.  
Date of previous issue : 23/05/2011.  
Version : 3  
Prepared by : Reckitt Benckiser LLC.  
Product Safety Department  
1 Philips Parkway  
Montvale, New Jersey 07646-1810 USA.  
FAX: 201-476-7770

Revision comments : Update as per US GHS.

☑ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



358467PSDS v3.0

## 16. Other information



RB is a member of the CSPA Product Care Product Stewardship Program.



# Material Safety Data Sheet

ECOTEMP ULTRA DRY

**ECOLAB®**

## 1. Product and company identification

Trade name of product : ECOTEMP ULTRA DRY

Product use : Rinse Additive

Product dilution information : Up to 311ppm in water

Supplier's information : Ecolab Co.  
5105 Tomken Road  
Mississauga ON L4W 2X5  
1-800-352-5326

Code : 913640-01

Date of issue : 26-March-2013

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
Outside United States and Canada CALL 1-651-222-5352 (in USA)

## 2. Hazards identification

Product AS SOLD

Physical state : Liquid.

Emergency overview : WARNING!

MAY CAUSE EYE IRRITATION.

Avoid contact with eyes. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

### Potential acute health effects

Product AS SOLD

Eyes : Slightly irritating to the eyes.

Skin : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

See toxicological information (Section 11)

### Product AT USE DILUTION

Liquid.  
CAUTION !

No specific hazard.  
No specific hazard.

### Product AT USE DILUTION

No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.

## 3. Composition/information on ingredients

### Product AS SOLD

Name  
alcohols, c10-16, ethoxylated

<u>CAS number</u>	<u>% by weight</u>
68002-97-1	3 - 7

### Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## 4. First-aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse with water for a few minutes.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention if symptoms occur.	Get medical attention if symptoms occur.

## 5. Fire-fighting measures

### Product AS SOLD

Auto-ignition temperature	: Not available.
Flammable limits	: Not available.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special remarks on fire hazards	: Not available.
Special remarks on explosion hazards	: Not available.
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire.  Dyke area of fire to prevent runoff. In a fire or if heated, a pressure increase will occur and the container may burst.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Use personal protective equipment as required.	Use personal protective equipment as required.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.	Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.
Methods for cleaning up	: Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

## 7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Avoid contact with eyes. Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children. Store in a closed container. Store between the following temperatures: 0 and 50°C	Keep out of reach of children.

## 8. Exposure controls/personal protection

**Engineering measures** : **Product AS SOLD**  
: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protection

**Eyes** : No protective equipment is needed under normal use conditions.  
**Hands** : No protective equipment is needed under normal use conditions.  
**Skin** : No protective equipment is needed under normal use conditions.  
**Respiratory** : No special protection is required.

### Product AT USE DILUTION

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No special protection is required.

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
No exposure limit value known.											

Consult local authorities for acceptable exposure limits.

## 9. Physical and chemical properties

**Physical state** : **Product AS SOLD**  
: Liquid.  
**Flash point** : > 100°C  
: Product does not support combustion.  
**Colour** : Green [Dark]  
**Odour** : Odourless  
**pH** : 3.17 [Conc. (% w/w): 100%]  
**Boiling/condensation point** : Not available.  
**Melting/freezing point** : Not available.  
**Relative density** : 1.007 to 1.027  
**Vapour pressure** : Not available.  
**Vapour density** : Not available.  
**Odour threshold** : Not available.  
**Evaporation rate** : Not available.  
**Viscosity** : Not available.  
**Dispersibility properties** : Not available.  
**Solubility** : Easily soluble in the following materials: cold water and hot water.  
**LogK<sub>ow</sub>** : Not available.

### Product AT USE DILUTION

Liquid.  
> 100°C

Clear  
Odourless  
7.5 to 8.5

## 10. Stability and reactivity

### Product AS SOLD

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
- Conditions of instability** : Not available.
- Reactivity** : Not available.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerisation** : Under normal conditions of storage and use, hazardous polymerisation will not occur.

## 11. Toxicological information

### Potential acute health effects

#### Product AS SOLD

- Eyes** : Slightly irritating to the eyes.
- Skin** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

### Product AS SOLD

### Potential chronic health effects

- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenic effects** : No known significant effects or critical hazards.
- Reproductive effects** : No known significant effects or critical hazards.
- Sensitization to Product** : No known significant effects or critical hazards.
- Synergistic products (toxicologically)** : Not available.

### Toxicity data

Product/ingredient name	Test	Route	Result	Species
alcohols, c10-16, ethoxylated	LD50	Dermal	>2000 mg/kg	Rat
	LD50	Oral	>1000 mg/kg	Rat
	LC50	Inhalation	>50 mg/l	Rat

### Other adverse effects

- Target organs** : Not available.

## 12. Ecological information

- Ecotoxicity** : Not reported

## 13. Disposal considerations

### Product AS SOLD

- Waste disposal** : Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

### Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

## 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Product AS SOLD

### TDG

TDG Classification Not regulated.

### IMO/IMDG

IMO/IMDG Classification Not regulated.

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

## 15. Regulatory information

Product AS SOLD

Product AT USE DILUTION

WHMIS : Not hazardous by WHMIS criteria.

Not hazardous by WHMIS criteria.

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

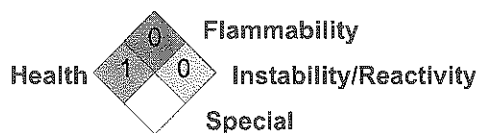
## 16. Other information

Product AS SOLD

Hazardous Material :  
Information System (U.S.A.)

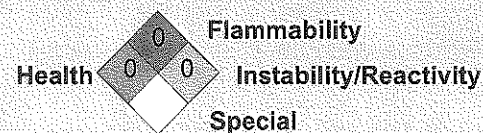
Health	1
Flammability	0
Physical hazards	0

National Fire Protection :  
Association (U.S.A.)



Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0



Date of issue : 26-March-2013

Responsible name : Regulatory Affairs  
1-800-352-5326

▣ Indicates information that has changed from previously issued version.

Notice to reader

**16. Other information**

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.





## SAFETY DATA SHEET

MEDALLION

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : MEDALLION

Other means of identification : Not applicable

Recommended use : Metal polish

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 01/03/2018

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

Eye irritation : Category 2A

## GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.

Precautionary Statements : **Prevention:**  
Wash skin thoroughly after handling. Wear eye protection/ face protection.  
**Response:**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Other hazards : None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
white mineral oil, petroleum	8042-47-5	30 - 60
gas oil, blend	64741-44-2	30 - 60
2-(2-butoxyethoxy)ethanol	112-34-5	10 - 30

## SAFETY DATA SHEET

### MEDALLION

#### SECTION 4. FIRST AID MEASURES

In case of eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
In case of skin contact	: Rinse with plenty of water.
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention.
Protection of first-aiders	: If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	: Treat symptomatically.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

#### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Not flammable or combustible.
Hazardous combustion products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus
Special protective equipment for fire-fighters	: Use personal protective equipment.
Specific extinguishing methods	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	: Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not

## SAFETY DATA SHEET

### MEDALLION

reach a waterway. Do not flush into surface water or sanitary sewer system.

#### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
white mineral oil, petroleum	8042-47-5	TWA (Mist)	5 mg/m3	NIOSH REL
		STEL (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA Z1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
2-(2-butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

##### Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid  
Color : clear, light yellow  
Odor : slight  
pH : Not applicable

## SAFETY DATA SHEET

### MEDALLION

Flash point	: Not applicable, Does not sustain combustion.
Odor Threshold	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: > 100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 0.849 - 0.873
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: 32.900 mm <sup>2</sup> /s (40 °C)
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: None known.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

## SAFETY DATA SHEET

### MEDALLION

Eyes : Causes serious eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

#### Experience with human exposure

Eye contact : Redness, Pain, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Toxicity

##### Product

Acute oral toxicity : Acute toxicity estimate : 2,000 - 5,000 mg/kg

Acute inhalation toxicity : 4 h Acute toxicity estimate : > 5 mg/l  
Test atmosphere: dust/mist

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitization : No data available

Carcinogenicity : No data available

Reproductive effects : No data available

Germ cell mutagenicity : No data available

Teratogenicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

Aspiration toxicity : No data available

### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

#### Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

## SAFETY DATA SHEET

### MEDALLION

#### Ingredients

Toxicity to fish : white mineral oil, petroleum  
96 h LC50 Oncorhynchus mykiss (rainbow trout): > 100 mg/l  
  
2-(2-butoxyethoxy)ethanol  
96 h LC50 Fish: 1,300 mg/l

#### Ingredients

Toxicity to daphnia and other : gas oil, blend  
aquatic invertebrates 96 h LC50 Americamysis bahia: 589 mg/l

#### Persistence and degradability

Biodegradable

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

#### Land transport (DOT)

Not dangerous goods

#### Sea transport (IMDG/IMO)

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

## SAFETY DATA SHEET

### MEDALLION

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

2-(2-butoxyethoxy)ethanol	112-34-5	19.8 %
---------------------------	----------	--------

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

#### United States TSCA Inventory :

On TSCA Inventory

#### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

#### Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

#### New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

#### Japan. ENCS - Existing and New Chemical Substances Inventory :

not determined

#### Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

#### Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

#### China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

#### Taiwan Chemical Substance Inventory (TCSI) :

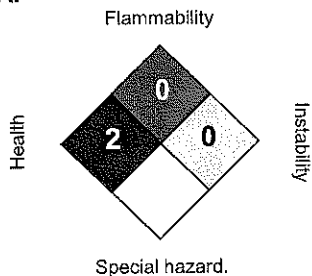
On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

## SAFETY DATA SHEET

### MEDALLION

#### NFPA:



#### HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 01/03/2018  
Version : 1.2  
Prepared by : Regulatory Affairs

**REVISED INFORMATION:** Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.





## SAFETY DATA SHEET

## SOLID BRILLIANCE

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SOLID BRILLIANCE

Other means of identification : Not applicable

Recommended use : Rinse additive

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.025 %

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 05/02/2017

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

## Product AS SOLD

Eye irritation : Category 2B

## Product AT USE DILUTION

Not a hazardous substance or mixture.

## GHS label elements

## Product AS SOLD

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**  
Wash skin thoroughly after handling.  
**Response:**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

## Product AT USE DILUTION

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

## Product AS SOLD

Other hazards : None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

## SAFETY DATA SHEET

### SOLID BRILLIANCE

#### Product AS SOLD

Pure substance/mixture : Mixture

#### Chemical name

Urea  
alcohols, c12-15, ethoxylated  
Propylene glycol

#### CAS-No.

57-13-6  
68131-39-5  
57-55-6

#### Concentration (%)

10 - 30  
1 - 5  
1 - 5

#### Product AT USE DILUTION

No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

#### Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Product AS SOLD

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus

## SAFETY DATA SHEET

### SOLID BRILLIANCE

Special protective equipment for fire-fighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.

##### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### SECTION 7. HANDLING AND STORAGE

##### Product AS SOLD

Advice on safe handling : Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

##### Product AT USE DILUTION

Advice on safe handling : Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Product AS SOLD

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
Urea	57-13-6	TWA	10 mg/m <sup>3</sup>	AIHA WEEL
Propylene glycol	57-55-6	TWA	10 mg/m <sup>3</sup>	AIHA WEEL

## SAFETY DATA SHEET

### SOLID BRILLIANCE

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

#### Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: Cast Solid	liquid
Color	: clear, dark green	light green
Odor	: odorless	odorless
pH	: 6.5 - 7.5, (1 %)	6.5 - 8.0
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: No data available	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 1.5 - 1.6	
Water solubility	: soluble	

## SAFETY DATA SHEET

### SOLID BRILLIANCE

Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

#### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: None known.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eye contact, Skin contact

#### Potential Health Effects

#### Product AS SOLD

Eyes	: Causes eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

#### Product AT USE DILUTION

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.

## SAFETY DATA SHEET

### SOLID BRILLIANCE

Chronic Exposure : Health injuries are not known or expected under normal use.

#### Experience with human exposure

##### Product AS SOLD

Eye contact : Redness, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

##### Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Toxicity

##### Product AS SOLD

###### Product

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Acute inhalation toxicity : No data available

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Skin corrosion/irritation : No skin irritation

Serious eye damage/eye irritation : Mild eye irritation

Respiratory or skin sensitization : No data available

Carcinogenicity : No data available

Reproductive effects : No data available

Germ cell mutagenicity : No data available

Teratogenicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

Aspiration toxicity : No data available

##### Ingredients

Acute inhalation toxicity : Urea  
4 h LC50 Rat: 2.71 mg/l

Propylene glycol  
4 h LC50 Rat: 158.5 mg/l

### SECTION 12. ECOLOGICAL INFORMATION

## SAFETY DATA SHEET

### SOLID BRILLIANCE

#### Product AS SOLD

##### Ecotoxicity

Environmental Effects : Harmful to aquatic life.

##### Product

Toxicity to fish : 96 h LC50: 64.81 mg/l

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

##### Ingredients

Toxicity to daphnia and other aquatic invertebrates : Propylene glycol  
48 h EC50: 18,340 mg/l

##### Ingredients

Toxicity to algae : Propylene glycol  
96 h EC50: 19,000 mg/l

##### Persistence and degradability

#### Product AS SOLD

Readily biodegradable.

#### Product AT USE DILUTION

Readily biodegradable.

##### Bioaccumulative potential

No data available

##### Mobility in soil

No data available

##### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

Disposal methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

#### Product AT USE DILUTION

Disposal methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

## SAFETY DATA SHEET

### SOLID BRILLIANCE

**Disposal considerations** : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

#### SECTION 14. TRANSPORT INFORMATION

##### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

##### Land transport (DOT)

Not dangerous goods

##### Sea transport (IMDG/IMO)

Not dangerous goods

#### SECTION 15. REGULATORY INFORMATION

##### Product AS SOLD

##### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

##### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

**Switzerland. New notified substances and declared preparations :**  
not determined

**United States TSCA Inventory :**  
On TSCA Inventory

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL

**Australia Inventory of Chemical Substances (AICS) :**  
On the inventory, or in compliance with the inventory



## SAFETY DATA SHEET

### SOLID BRILLIANCE

**New Zealand. Inventory of Chemical Substances :**  
On the inventory, or in compliance with the inventory

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
not determined

**Korea. Korean Existing Chemicals Inventory (KECI) :**  
On the inventory, or in compliance with the inventory

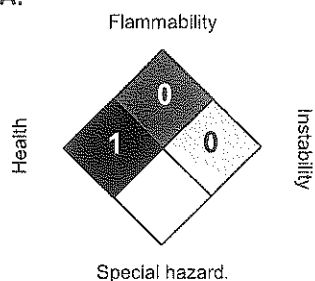
**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
On the inventory, or in compliance with the inventory

**China. Inventory of Existing Chemical Substances in China (IECSC) :**  
On the inventory, or in compliance with the inventory

**Taiwan Chemical Substance Inventory :**  
On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

**Product AS SOLD**  
**NFPA:**

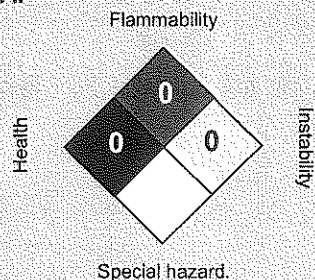


**HMIS III:**

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

**Product AT USE DILUTION**  
**NFPA:**



**HMIS III:**

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 05/02/2017  
Version : 1.0  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

## **SAFETY DATA SHEET**

### **SOLID BRILLIANCE**

The information provided in this Material 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.



## SAFETY DATA SHEET

## ECOTEMP ULTRA KLENE

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ECOTEMP ULTRA KLENE

Other means of identification : Not applicable

Recommended use : Machine Warewashing Detergent

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.08 % - 0.11 %

Company : Ecolab Inc.  
370 N. Wabasha Street  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency telephone : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 02/12/2015

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

## Product AS SOLD

Skin corrosion : Category 1A

Serious eye damage : Category 1

## Product AT USE DILUTION

Not a hazardous substance or mixture.

## GHS Label element

## Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**

Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse.

**Storage:**

Store locked up.

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Product AT USE DILUTION****Precautionary Statements****Prevention:**

Wash hands thoroughly after handling.

**Response:**

Get medical advice/ attention if you feel unwell.

**Storage:**

Store in accordance with local regulations.

**Other hazards**

: None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Product AS SOLD**

Pure substance/mixture : Mixture

**Chemical Name**  
sodium hydroxide

**CAS-No.**  
1310-73-2

**Concentration (%)**  
10 - 30

**Product AT USE DILUTION**

No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

**Product AS SOLD**

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

**Product AT USE DILUTION**

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

If inhaled : Get medical attention if symptoms occur.

#### SECTION 5. FIRE-FIGHTING MEASURES

##### Product AS SOLD

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### Product AS SOLD

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

##### Product AT USE DILUTION

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### SECTION 7. HANDLING AND STORAGE

##### Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. SAFETY REMINDER:

- \* Never pour product into unlabeled containers
- \* Use only for recommended uses. Read label.
- \* Never take product home. Use only in workplace.

Conditions for safe storage : Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

##### Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Product AS SOLD

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hydroxide	1310-73-2	Ceiling	2 mg/m <sup>3</sup>	ACGIH
		Ceiling	2 mg/m <sup>3</sup>	NIOSH REL
		TWA	2 mg/m <sup>3</sup>	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

##### Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

and body in case of contact or splash hazard.

#### Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, dark red	light pink
Odor	: odorless	odorless
pH	: 13.5, 100 %	10.6 - 11.3
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: No data available	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 1.25	
Water solubility	: soluble	
Solubility in other solvents	: No data available	
Partition coefficient: n-octanol/water	: No data available	
Autoignition temperature	: No data available	
Thermal decomposition	: No data available	
Viscosity, kinematic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Molecular weight	: No data available	
VOC	: No data available	

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

#### SECTION 10. STABILITY AND REACTIVITY

##### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

##### Potential Health Effects

##### Product AS SOLD

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

##### Product AT USE DILUTION

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

##### Experience with human exposure

##### Product AS SOLD

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough



## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

#### Product AT USE DILUTION

Eye contact : No symptoms known or expected.  
Skin contact : No symptoms known or expected.  
Ingestion : No symptoms known or expected.  
Inhalation : No symptoms known or expected.

#### Toxicity

##### Product AS SOLD

Acute oral toxicity : No data available  
Acute inhalation toxicity : No data available  
Acute dermal toxicity : No data available  
Skin corrosion/irritation : No data available  
Serious eye damage/eye irritation : No data available  
Respiratory or skin sensitization : No data available  
Carcinogenicity : No data available  
Reproductive effects : No data available  
Germ cell mutagenicity : No data available  
Teratogenicity : No data available  
STOT-single exposure : No data available  
STOT-repeated exposure : No data available  
Aspiration toxicity : No data available

### SECTION 12. ECOLOGICAL INFORMATION

#### Product AS SOLD

##### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

##### Product

Toxicity to fish : No data available  
Toxicity to daphnia and other aquatic invertebrates : No data available  
Toxicity to algae : No data available

##### Ingredients

Toxicity to daphnia and other aquatic invertebrates : sodium hydroxide  
48 h EC50: 40 mg/l

##### Persistence and degradability

No data available

##### Bioaccumulative potential

No data available

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

#### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

#### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

#### Land transport (DOT)

UN number : 1824

Description of the goods : Sodium hydroxide solution

Class : 8

Packing group : II

Environmentally hazardous : no

#### Sea transport (IMDG/IMO)

UN number : 1824

Description of the goods : SODIUM HYDROXIDE SOLUTION

Class : 8

Packing group : II

Marine pollutant : no

#### Product AT USE DILUTION

Not intended for transport.

### SECTION 15. REGULATORY INFORMATION

#### Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

#### CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	4364

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

#### United States TSCA Inventory :

On TSCA Inventory

#### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

#### Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

#### New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

#### Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

#### Japan. ISHL - Inventory of Chemical Substances (METI) :

On the inventory, or in compliance with the inventory

#### Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

#### Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

#### China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

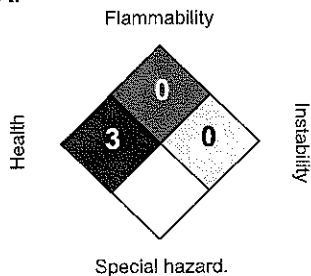
### SECTION 16. OTHER INFORMATION

Product AS SOLD

## SAFETY DATA SHEET

### ECOTEMP ULTRA KLENE

#### NFPA:



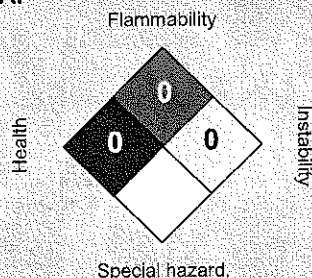
#### HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

#### Product AT USE DILUTION

##### NFPA:



##### HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 02/12/2015  
Version : 1.2  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.



## SAFETY DATA SHEET

## KEYSTONE SANITIZER

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KEYSTONE SANITIZER

Other means of identification : Not applicable

Recommended use : Sanitizer

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.00024 % - 0.84 %  
UP TO 14 OZ/13 GAL OF WATER

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 10/13/2017

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

## Product AS SOLD

Oxidizing liquids : Category 2

Skin corrosion : Category 1A

Serious eye damage : Category 1

## Product AT USE DILUTION

Acute toxicity (Oral) : Category 4

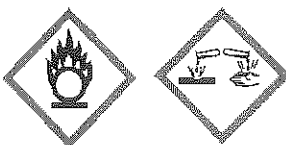
Acute toxicity (Dermal) : Category 4

Eye irritation : Category 2B

## GHS label elements

## Product AS SOLD

Hazard pictograms



Signal Word : Danger

Hazard Statements : May intensify fire; oxidizer.  
Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**  
Keep away from heat. Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

#### Product AT USE DILUTION

Hazard pictograms



Signal Word

: Warning

Hazard Statements

: Harmful if swallowed or in contact with skin.  
Causes eye irritation.

Precautionary Statements

**Prevention:**

Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing.

**Response:**

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

#### Product AS SOLD

Other hazards

: Mixing this product with acid or ammonia releases chlorine gas.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Product AS SOLD

Pure substance/mixture

: Mixture

**Chemical name**  
sodium hypochlorite

**CAS-No.**  
7681-52-9

**Concentration (%)**  
8.4

#### Product AT USE DILUTION

**Chemical name**  
sodium hypochlorite

**CAS-No.**  
7681-52-9

**Concentration (%)**  
0.0706

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact

: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact

: Wash off immediately with plenty of water for at least 15 minutes. Use

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

#### Product AT USE DILUTION

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops and persists.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Product AS SOLD

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Oxidizer. Contact with other material may cause fire.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

#### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### SECTION 7. HANDLING AND STORAGE

#### Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.

Conditions for safe storage : Keep in a cool, well-ventilated place. Do not store near acids. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : -15 °C to 40 °C

#### Product AT USE DILUTION

Advice on safe handling : Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Product AS SOLD

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of	Permissible	Basis
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## SAFETY DATA SHEET

### KEYSTONE SANITIZER

		exposure	concentration	
sodium hypochlorite	7681-52-9	STEL	2 mg/m3	AIHA WEEL
chlorine	7782-50-5	TWA	0.5 ppm	ACGIH
		STEL	1 ppm	ACGIH
		Ceiling	0.5 ppm 1.45 mg/m3	NIOSH REL
		C	1 ppm 3 mg/m3	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.  
Wash face, hands and any exposed skin thoroughly after handling.  
Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

#### Product AT USE DILUTION

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: light yellow	colorless
Odor	: Chlorine	slight chlorine
pH	: 12.5, (100 %)	6.0 - 9.5
Flash point	: Not applicable	

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

Odor Threshold	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.154
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

#### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Mixing this product with acid or ammonia releases chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Acids Metals
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

#### Product AS SOLD

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

#### Product AT USE DILUTION

Eyes	: Causes eye irritation.
Skin	: Harmful in contact with skin.
Ingestion	: Harmful if swallowed.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

#### Experience with human exposure

#### Product AS SOLD

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

#### Product AT USE DILUTION

Eye contact	: Redness, Irritation
Skin contact	: No information available.
Ingestion	: No information available.
Inhalation	: No symptoms known or expected.

#### Toxicity

#### Product AS SOLD

##### Product

Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available
Skin corrosion/irritation	: No data available
Respiratory or skin sensitization	: No data available
Carcinogenicity	: No data available
Reproductive effects	: No data available
Germ cell mutagenicity	: No data available

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

Teratogenicity : No data available  
STOT-single exposure : No data available  
STOT-repeated exposure : No data available  
Aspiration toxicity : No data available

#### Ingredients

Acute oral toxicity : sodium hypochlorite  
LD50 Rat: 5,230 mg/kg

#### Ingredients

Acute dermal toxicity : sodium hypochlorite  
LD50 Rabbit: > 10,000 mg/kg

### SECTION 12. ECOLOGICAL INFORMATION

#### Product AS SOLD Ecotoxicity

Environmental Effects : Toxic to aquatic life.

#### Product

Toxicity to fish : 96 h LC50 Oncorhynchus mykiss (rainbow trout): 2.1 mg/l  
96 h LC50 Inland Silverside: 7.6 mg/l

Toxicity to daphnia and other aquatic invertebrates : 48 h LC50 Daphnia dubia (Water flea): 0.57 mg/l  
48 h LC50 Americamysis bahia: 18.1 mg/l

Toxicity to algae : No data available

#### Persistence and degradability

#### Product AS SOLD

Not applicable - Biocide

#### Product AT USE DILUTION

Not applicable - Biocide

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

Disposal methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery Act Hazardous waste : D002 (Corrosive)

#### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

#### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

#### Land transport (DOT)

UN number : 1791  
Description of the goods : Hypochlorite solutions  
Class : 8  
Packing group : III  
Environmentally hazardous : no

#### Sea transport (IMDG/IMO)

UN number : 1791  
Description of the goods : HYPOCHLORITE SOLUTION  
Class : 8  
Packing group : III  
Marine pollutant : yes

### SECTION 15. REGULATORY INFORMATION

#### Product AS SOLD

EPA Registration number : 1677-52

EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ
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## SAFETY DATA SHEET

### KEYSTONE SANITIZER

			(lbs)
sodium hypochlorite	7681-52-9	100	1000

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard  
Fire Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

#### Switzerland. New notified substances and declared preparations :

On the inventory, or in compliance with the inventory

#### United States TSCA Inventory :

On TSCA Inventory

#### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

#### Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

#### New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

#### Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

#### Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

#### Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

#### China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

#### Taiwan Chemical Substance Inventory :

On the inventory, or in compliance with the inventory

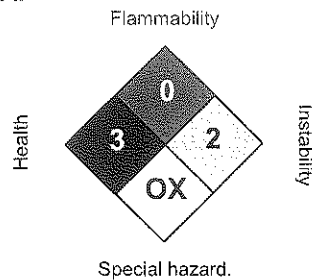
### SECTION 16. OTHER INFORMATION

Product AS SOLD

## SAFETY DATA SHEET

### KEYSTONE SANITIZER

#### NFPA:



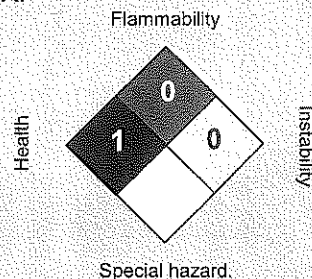
#### HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

#### Product AT USE DILUTION

#### NFPA:



#### HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

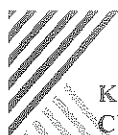
Issuing date : 10/13/2017  
Version : 1.7  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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## Material Safety Data Sheet

**Distributor:** Independent Marketing Alliance  
**Product:** ProPower Germicidal Ultra Bleach  
**EPA Reg. No.:** 70271-13-75686

### Section 1. Chemical Product and Company Identification

**Product Name/Trade Name** ProPower Germicidal Ultra Bleach  
**Manufacturer:** KIK INTERNATIONAL INC.  
2921 Corder Street  
Houston, Texas 77054  
**Distributor:** Independent Marketing Alliance  
16000 Memorial Drive, Suite 200  
Houston, Texas 77079  
**Contact Number:** Tel: 905-660-0444  
**24 Hour Emergency Contact Number:** 1-800-424-9300  
**Prepared By:** KIK CUSTOM PRODUCTS Laboratory  
**Date Last Revised:** June 29, 2005  
**Replaces Date:** May 30, 2005

### Section 2. Hazardous Ingredients

Name	%	CAS#	LD50/LC50
Sodium Hypochlorite	6.0 - 7.0	7681-52-9	5800 mg/kg / >10500 mg/m <sup>3</sup> (1hr)

### Section 3. Physical Data

State	Liquid	pH	12.6 maximum
Appearance	Clear Pale Yellow	% Volatile	93% Approx.
Odour	Chlorine	Boiling Point	100°C
Specific Gravity	1.080 minimum	Vapour Pressure	N Av
Solubility	100%		

### Section 4. Fire & Explosion

Flammable:	YES	NO X
Means of Extinction:	Water, Carbon Dioxide, Dry Chemical or Foam	
Special Procedures:	Fire fighters should wear self-contained breathing apparatus.	
Flash Point: & Method:	Not Applicable	
Hazardous Combustion Products:	Chlorine Gas.	

### Section 5. Reactivity Data

Chemical Stability:	YES	X	NO
Conditions:	Temperature above 40°C, sunlight and metals,		
Incompatibility:	YES	X	NO
What Substances:	Acids, ammonia, urea, metals & oxidizers.		
Reactivity / Conditions:	Not Applicable		
Hazardous Decomposition Products:	Chlorine gas released by contact with acids. Contact with ammonia or urea produces nitrogen gas and chloramines. Oxygen is released on contact with metals.		



**Product:** ProPower Germicidal Ultra Bleach  
**EPA Reg. No.:** 70271-13-75686

### Section 6. Toxicological Properties

#### Route of Entry

Skin Contact	X	Skin Absorption	Eye Contact	X
Inhalation Acute	X	Inhalation Chronic	Ingestion	X

**Effects of Acute Exposure:** Inhalation of vapours will irritate breathing passages and may cause breathing difficulty. CORROSIVE will cause severe irritation to eyes and skin. May cause permanent damage if not treated properly. Ingestion can cause corrosion of mucous membranes, severe esophageal burns and perforation of esophagus or stomach.

**Effects of chronic exposure:** Not Known.

**Carcinogenicity Reproductive Effects: Teratogenicity Mutagenicity:** Effects not known.

### Section 7. Preventative Measures

#### Protective Equipment

Gloves: Impervious PVC or Neoprene. Eyes: Chemical splash goggles. Face shield also helpful.

Respiratory: Not normally required. Footwear: Protect shoes and feet when using product for floor cleaning.

**LEAK AND SPILL PROTECTION:** Small spills: Dilute product by flooding area with large quantity of water and flush to sanitary sewer. Large spills: Contain run-off by diking with suitable material. Soak up liquid on inert absorbent and transfer to approved container. Prevent spill from entering sewers or waterways

**WASTE DISPOSAL:** Reclaim or dispose in accordance with local regulations.

**STORAGE REQUIREMENTS:** Store in a cool, dry and well-ventilated area.

### Section 8. First Aid Measures

**Skin:** Wash with soap and water

**Eyes:** Flush eyes with cool running water holding eyelids apart to ensure thorough rinsing for 15 minutes. Remove contact lenses. See a doctor immediately.

**Inhalation:** Move to fresh air and restore breathing, if required.

**Ingestion:** DO NOT INDUCE VOMITING! Drink large amounts of water. Do not give anything by mouth to a convulsing or unconscious person. See a doctor immediately.

**General Advice:** If irritation occurs see a doctor immediately.

### Section 9. Preparation Information

WHMIS Rating: Health Hazard	2
Fire Hazard	0
Reactivity	2

**DOT:** Non-regulated

As the handling and use of products under user's conditions are beyond our control, no warranty, expressed or implied, is made concerning this product. The information contained herein is offered only as guide to the handling of this specific material and is not intended to be all-inclusive in the manner and conditions of use and handling. The user assumes all risks of use or handling, whether or not in accordance with any directions or suggestions of the manufacturer. Manufacturer shall not be liable to purchaser or any other person for loss or damages directly or indirectly arising from the use of our product.



# SAFETY DATA SHEET

Issuing date 03-Nov-2011

Revision Date 09-May-2014

Version 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name Swisher Select Pink Pot & Pan Detergent

### Other means of identification

Product Code 40227-1

Document 40227-1/ 40227-5

### Recommended use of the chemical and restrictions on use

Recommended use Heavy Duty Pot & Pan Detergent

### Details of the supplier of the safety data sheet

#### Distributor

Swisher Hygiene Inc.  
4725 Piedmont Row Drive  
Suite 400  
Charlotte, NC 28210

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)  
1-703-527-3887 (INTERNATIONAL)

Company Phone Number 800-444-4138

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### **Emergency Overview**

#### **Warning**

If medical advice is needed, have product container or label at hand  
Keep out of reach of children  
Read label before use

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** Transparent

**Physical state** Liquid

**Odor** Vanilla

**Precautionary Statements - Prevention**

- Do not handle until all safety precautions have been read and understood

**Precautionary Statements - Response**

- IF exposed or concerned: Get medical advice/attention
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Wash with plenty of soap and water
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place

**Precautionary Statements - Disposal**

Dispose of contents/container to approved disposal facility

**Hazards not otherwise classified (HNOC)****Other information**

- Harmful to aquatic life with long lasting effects
- Unknown Acute Toxicity 2,7415% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Flush with flowing water for 15 minutes & see physician.
<b>Skin contact</b>	Wash with water for 15 minutes. See physician if irritation persists.
<b>Inhalation</b>	Move to fresh air. If irritation persists, see a physician.
<b>Ingestion</b>	Do not induce vomiting unless directed by a physician. If conscious and alert, give two glasses of water. Seek medical attention immediately.

**Most important symptoms/effects, acute and delayed**

<b>Main Symptoms</b>	The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.
----------------------	---

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

<b>Notes to physician</b>	Treat symptomatically.
---------------------------	------------------------

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use water spray or fog, foam, dry chemical, carbon dioxide, alcohol foam, if product is involved.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

Use water spray to cool adjacent fire exposed containers. Product will not burn but may splatter if temperature exceeds boiling point.

### **Hazardous Combustion Products**

If burned, normal combustion products: Carbon dioxide, Carbon monoxide; Nitrogen oxides.

### Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

### Protective Equipment and Precautions for Firefighters

Avoid exposure to fumes or vapors.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment.

### Environmental precautions

#### **Environmental precautions**

See Section 12 for additional Ecological Information.

### 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**

Mop up & flush to sanitary sewer with plenty of water. Floors may be slippery. Use care to avoid falls.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

#### **Technical measures/Storage conditions**

Keep container in cool well-ventilated area. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children.

#### **Incompatible products**

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** Review Section 3 & 4 for Exposure Guidelines.  
**NIOSH IDLH:** *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation and that running water is available for washing eyes and skin  
**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Splash-proof chemical goggles or face shield.

**Skin and body protection** Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron..

**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.

**Hygiene measures** Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Vanilla
<b>Appearance</b>	Transparent	<b>Odor Threshold</b>	No information available
<b>Color</b>	Pink		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Methods</u></b>
pH	7.5	
Melting/freezing point	No information available	
Boiling point/boiling range	100 °C / 212 °F	
Flash Point	No information available	
Evaporation rate	GT 1.00	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	17	
Vapor density	0.62	
Specific Gravity	1.006 ± .005	
Water solubility	Completely Soluble	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Viscosity, dynamic	No information available	
Explosive properties	No information available	
Oxidizing Properties	No information available	

**Other information**

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	< 1%
<b>Density VALUE</b>	8.46
<b>Bulk Density VALUE</b>	No information available

## 10. STABILITY AND REACTIVITY

**Chemical stability**

Stable.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

If burned, normal combustion products: Carbon dioxide, Carbon monoxide; Nitrogen oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

May be harmful if swallowed or if inhaled

**Inhalation**

Inhalation of vapors in high concentration may cause irritation of the respiratory system.

**Eye contact**

Irritating to eyes.

**Skin contact**

Irritating to skin.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Information on toxicological effects****Symptoms**

No information available.

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

No information available.

**Mutagenic effects**

No information available.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

*ACGIH: (American Conference of Governmental Industrial Hygienists)**A3 - Animal Carcinogen**IARC: (International Agency for Research on Cancer)**Group 1 - Carcinogenic to Humans**NTP: (National Toxicity Program)**Known - Known Carcinogen**OSHA: (Occupational Safety & Health Administration)**X - Present***Reproductive toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Chronic toxicity**

No known effect.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity**

2.7415% of the mixture consists of ingredient(s) of unknown toxicity

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

**ATEmix (oral)**

6145 mg/kg

**ATEmix (dermal)**

53704 mg/kg

ATEmix (inhalation-dust/mist) 90.4 mg/l

**12. ECOLOGICAL INFORMATION**

This product contains a chemical which is listed as a marine pollutant according to DOT. Alkylbenzenesulphonates.

**Ecotoxicity**

5.3915% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. TRANSPORT INFORMATION****DOT**

Proper shipping name  
Marine Pollutant

Not regulated

Cleaning Compound, Not Regulated

This product contains a chemical which is listed as a marine pollutant according to DOT.  
Alkylbenzenesulphonates.

**15. REGULATORY INFORMATION****International Inventories**

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



**Legend:**

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

**U.S. State Regulations****California Proposition 65**

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

**U.S. State Right-to-Know Regulations**

This product contains substances regulated by state right-to-know regulations.

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health Hazards 1	Flammability 0	Instability 0	Physical and chemical hazards -
<b><u>HMIS</u></b>	Health hazard 1	Flammability 0	Physical Hazards 0	Personal protection A

Prepared By Swisher Hygiene Inc.  
4725 Piedmont Row Drive  
Suite 400  
Charlotte, NC 28210  
Issuing date 03-Nov-2011  
Revision Date 09-May-2014  
Revision Note  
No information available

**Disclaimer**

The information provided in this Material 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.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issuing date 20-Feb-2013

Revision Date 22-Oct-2014

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name Swisher Select Neutral APC

### Other means of identification

Product Code 41754-1

### Recommended use of the chemical and restrictions on use

Recommended use Neutral All Purpose Cleaner

### Details of the supplier of the safety data sheet

#### Distributor

Swisher Hygiene Inc.  
4725 Piedmont Row Drive  
Suite 400  
Charlotte, NC 28210

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)  
1-703-527-3887 (INTERNATIONAL)

Company Phone Number 800-444-4138

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Skin sensitization	Category 1

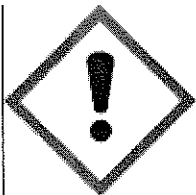
### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard Statements**

Harmful if swallowed  
Harmful in contact with skin  
May cause an allergic skin reaction

**Appearance** Transparent**Physical state** Liquid**Odor** Citrus**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
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

- Call a POISON CENTER or doctor/physician if you feel unwell
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Wash with plenty of soap and water
- Wash contaminated clothing before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store in a well-ventilated place

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- Toxic to aquatic life with long lasting effects
- Harmful to aquatic life

Unknown Acute Toxicity

89.67% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
Dipropylene glycol monomethyl ether	34590-94-8	1% - 5%	*
D-Limonene	5989-27-5	0.1% - 3%	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First aid measures for different exposure routes**

General advice	Show this safety data sheet to the doctor in attendance.
Eye contact	Flush with flowing water for 15 minutes & see physician.
Skin contact	Wash with water for 15 minutes. See physician if irritation persists.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Do not induce vomiting unless directed by a physician. If conscious and alert, give two glasses of water. Seek medical attention immediately.

**Most important symptoms/effects, acute and delayed**

Main Symptoms	The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.
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**Indication of immediate medical attention and special treatment needed, if necessary**

Notes to physician	Treat symptomatically.
--------------------	------------------------

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use water spray or fog, foam, dry chemical, carbon dioxide, alcohol foam, if product is involved.

**Unsuitable Extinguishing Media** This product contains alcohols which will reduce the effectiveness of normal foam. Use alcohol-resistant foam instead.

**Specific hazards arising from the chemical**

Use water spray to cool adjacent fire exposed containers. Product will not burn but may splatter if temperature exceeds boiling point.

**Hazardous Combustion Products** If burned, normal combustion products: Carbon dioxide, Carbon monoxide; Nitrogen oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

Avoid exposure to fumes or vapors.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Personal precautions	Ensure adequate ventilation, especially in confined areas.
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**Environmental precautions**

Environmental precautions	See Section 12 for additional Ecological Information.
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**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	Mop up & flush to sanitary sewer with plenty of water. Floors may be slippery. Use care to avoid falls.
-------------------------	---

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

#### **Technical measures/Storage conditions**

Keep container in cool well-ventilated area. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children.

#### **Incompatible products**

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dipropylene glycol monomethyl ether 34590-94-8	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> STEL: 150 ppm STEL: 900 mg/m <sup>3</sup>

NIOSH IDLH: Immediately Dangerous to Life or Health

### Appropriate engineering controls

#### **Engineering Measures**

Ensure adequate ventilation and that running water is available for washing eyes and skin

#### **Individual protection measures, such as personal protective equipment**

##### **Eye/Face Protection**

Splash-proof chemical goggles or face shield.

##### **Skin and body protection**

Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron..

##### **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.

#### **Hygiene measures**

Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

#### **Physical state**

Liquid

#### **Appearance**

Transparent

#### **Color**

Yellow

#### **Odor**

Citrus

#### **Odor Threshold**

No information available

#### **Property**

#### **Values**

#### **Remarks • Methods**

##### **pH**

7

##### **Melting/freezing point**

No information available

##### **Boiling point/boiling range**

100 °C / 212 °F

##### **Flash Point**

No information available

##### **Evaporation rate**

GT 1.00

##### **Flammability (solid, gas)**

No information available

**Flammability Limits in Air**

Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor pressure	17
Vapor density	0.62
Specific Gravity	1.015 ± 0.005
Water solubility	Completely Soluble
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing Properties	No information available

**Other Information**

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	5%
Density VALUE	8.4
Bulk Density VALUE	No information available

**10. STABILITY AND REACTIVITY****Chemical stability**

Stable.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

If burned, normal combustion products: Carbon dioxide, Carbon monoxide; Nitrogen oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	May be harmful by inhalation, ingestion, or skin absorption.
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Dipropylene glycol monomethyl ether 34590-94-8	= 5230 mg/kg ( Rat )	= 9500 mg/kg ( Rabbit )	-
D-Limonene 5989-27-5	= 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-

Information on toxicological effects

**Symptoms** No information available.

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

**Sensitization** No information available.

**Mutagenic effects** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
D-Limonene 5989-27-5	-	Group 3	-	-

*IARC: (International Agency for Research on Cancer)*

*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic toxicity** No known effect.

**Aspiration hazard** No information available.

Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 89.67% of the mixture consists of ingredient(s) of unknown toxicity

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

**ATEmix (oral)** 1296 mg/kg

**ATEmix (dermal)** 1153 mg/kg

**12. ECOLOGICAL INFORMATION**Ecotoxicity

92.17% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Dipropylene glycol monomethyl ether 34590-94-8	-	10000: 96 h Pimephales promelas mg/L LC50 static	-
D-Limonene 5989-27-5	-	35: 96 h Oncorhynchus mykiss mg/L LC50 0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Dipropylene glycol monomethyl ether 34590-94-8	-0.064

Other adverse effects No information available

**13. DISPOSAL CONSIDERATIONS**Waste treatment

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.



Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
D-Limonene 5989-27-5	Toxic

#### 14. TRANSPORT INFORMATION

DOT Proper shipping name Not regulated  
Cleaning Compound, Not Regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA -  
DSL/NDL -  
EINECS/ELINCS -  
ENCS -  
IECSC -  
KECL -  
PICCS -  
AICS -

##### Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
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**

This product contains substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Dipropylene glycol monomethyl ether 34590-94-8	X	-	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health Hazards 1	Flammability 0	Instability 0	Physical and chemical hazards -
<b><u>HMIS</u></b>	Health hazard 1	Flammability 0	Physical Hazards 0	Personal protection X

**Prepared By** Swisher Hygiene Inc.  
4725 Piedmont Row Drive  
Suite 400  
Charlotte, NC 28210

**Issuing date** 20-Feb-2013  
**Revision Date** 22-Oct-2014  
**Revision Note**

No information available

**Disclaimer**

The information provided in this Material 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.

End of Safety Data Sheet