SWISHER

SAFETY DATA SHEET

SHF403715

Issuing date 10-Oct-2011 Revision Date 06-Nov-2014 Version 1

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

Product identifier

Product name Swisher LD-4500

Other means of identification

Product Code 40371-5 UN/ID No UN1719

Document 40371-15/40371-5

Recommended use of the chemical and restrictions on use

Recommended use Concentrated Built Detergent For Tough Conditions

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)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard Statements

Causes severe skin burns and eye damage



Appearance Transparent

Physical state Liquid

Odor Odorless

Precautionary Statements - Prevention

- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- · Wash contaminated clothing before reuse
- 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 locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Unknown Acute Toxicity

25.42% 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
Sodium hydroxide	1310-73-2	10% - 20%	*
Triethanolamine	102-71-6	< 5%	*
Dipropylene glycol monomethyl ether	34590-94-8	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. Immediately call a POISON CENTER or doctor/physician.

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Eye contact 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.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a physician or Poison Control Center immediately.

Ingestion Rinse mouth. Do NOT induce vomiting.

Protection of First-aiders Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce

artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

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.

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

Notes to physician Probable mucosal damage may contraindicate the use of gastric lavage.

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

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin

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

protection.

Other information Common Weak Acids suitable for neutralizing caustic alkalis: acetic acid, citric acid, lemon

juice, tartaric acid, vinegar.

Environmental precautions

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Environmental precautions

Neutralization is normally necessary before waste water is discharged into water treatment plants. Keep out of waterways. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Dike to contain spill and prevent entry into sewers, waterways, and low areas. Neutralize

with dilute acid. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Mop up & flush neutralized material to sewer with plenty of water.

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. Strong acids, contact with aluminum or zinc in the presence of

moisture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	-	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2			Ceiling: 2 mg/m ³
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	-
Dipropylene glycol monomethyl ether 34590-94-8	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 600 mg/m³ S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m ³ STEL: 150 ppm STEL: 900 mg/m ³

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 Safety glasses with side-shields.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

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 Remove and wash contaminated clothing before re-use.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state Liquid

Appearance Transparent Odor Odorless

Color Clear Liquid **Odor Threshold** No information available

Property Values Remarks • Methods 13.9

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** 1.21

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(%) 2.3%

Density VALUE No information available **Bulk Density VALUE** No information available

10. STABILITY AND REACTIVITY

Chemical stability

Stable.

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Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong oxidizing agents, Strong acids, contact with aluminum or zinc in the presence of moisture.

Hazardous Decomposition Products

If burned, normal combustion products: Carbon dioxide, Carbon monoxide; Nitrogen oxides. Hydrogen gas in contact with some metals.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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Product Information Causes severe skin burns and eye damage

Inhalation Corrosive to respiratory system. May cause drowsiness or dizziness.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin contact Causes burns.

Ingestion Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea, and

shock. May cause additional affects as listed under "Inhalation".

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Sodium hydroxide 1310-73-2	140 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 20 mL/kg (Rabbit) > 16 mL/kg (Rat)	-
Dipropylene glycol monomethyl ether 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/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 effectsNo 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.

Chemical Name	ACGIH	IARC	NTP	OSHA
Triethanolamine	-	Group 3	-	-
102-71-6		•		

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

Chronic toxicity Avoid repeated exposure. No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 25.42% 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)
 41497 mg/kg

 ATEmix (dermal)
 6523 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

25.42% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea	

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Sodium hydroxide	-	45.4: 96 h Oncorhynchus mykiss	-
1310-73-2		mg/L LC50 static	
Triethanolamine	216: 72 h Desmodesmus	10600 - 13000: 96 h Pimephales	-
102-71-6	subspicatus mg/L EC50 169: 96 h	promelas mg/L LC50 flow-through	
	Desmodesmus subspicatus mg/L	450 - 1000: 96 h Lepomis	
	EC50	macrochirus mg/L LC50 static 1000:	
		96 h Pimephales promelas mg/L	
		LC50 static	
Dipropylene glycol monomethyl	-	10000: 96 h Pimephales promelas	-
ether		mg/L LC50 static	
34590-94-8			

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient	
Triethanolamine 102-71-6	-2.53	
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	
Sodium hydroxide 1310-73-2	Toxic Corrosive	
1310-73-2		

14. TRANSPORT INFORMATION

DOT Regulated UN1719

Proper shipping name Caustic Alkali Liquid, n.o.s. (Sodium Hydroxide)

Hazard class 8
Packing Group II
Emergency Response Guide 154

Number

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS ENCS IECSC Complies

KECL Complies
PICCS Complies
AICS Complies

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/NDSL - 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	Yes

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lb	-	-	X
1310-73-2				

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):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

Ethyl alcohol is only a 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.

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Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2	X	X	Х
Triethanolamine 102-71-6	X	-	Х
Dipropylene glycol monomethyl ether 34590-94-8	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and chemical

hazards COR

HMIS Health hazard 3 Flammability 0 Physical Hazards 0 Personal protection X

Prepared By Swisher Hygiene Inc.

4725 Piedmont Row Drive

Suite 400

Charlotte, NC 28210

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Revision Note

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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