



# Material Safety Data Sheet

Issuing date 07-Oct-2011

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Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Swisher Hercules  
**Product code** 41740-1  
**Reference number(s)** 41740-5  
**Recommended Use** Heavy Duty All Purpose Cleaner Wax Stripper & Degreaser

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

**Chemical Emergency Phone Number** 800-424-9300 (Chemtrec)

**Company Emergency Phone Number** 800-444-4138

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Repeated or prolonged exposure may produce defatting of the skin

**Appearance** Clear Liquid

**Physical state** liquid.

**Odor** Glycol

### Potential Health Effects

#### Acute toxicity

**Eyes**

Corrosive. Contact may cause severe eye damage

**Skin**

Corrosive; may produce burns. Prolonged contact may result in burns and ulcerations. Its harmful if absorbed through the skin.

**Inhalation**

Hazardous in case of inhalation. May cause respiratory tract irritation. Liquid or spray mist may produce tissue damage on mucous membranes of eyes mouth and respiratory tract.

**Ingestion**

Can cause nausea and burns to mouth, throat and stomach.

#### Chronic Effects

No known effect based on information supplied

#### Aggravated Medical Conditions

None known.

#### Environmental hazard

See Section 12 for additional Ecological Information

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical Name	CAS-No	Weight %
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2-Butoxyethanol	111-76-2	<10
Potassium hydroxide	1310-58-3	<3
Tetrasodium EDTA	64-02-8	<1
Sodium metasilicate	6834-92-0	<2
Tetrapotassium pyrophosphate	7320-34-5	<2

#### 4. FIRST AID MEASURES

<b>Eye contact</b>	Flush with flowing water for 15 minutes & see physician.
<b>Skin contact</b>	Wash contaminated area with soap or mild detergent. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.
<b>Ingestion</b>	If product is swallowed, do not induce vomiting. If vomiting occurs keep head lower than hips to help prevent aspiration. Never give anything by mouth to an unconscious person. Get medical attention at once.
<b>Notes to physician</b>	Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Not flammable
<b>Flash point</b>	none
<b>Suitable Extinguishing Media</b>	Use water vapor, foam or fog. Firefighters should wear proper protective equipment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none
<b>Sensitivity to Static Discharge</b>	none
<b>Protective Equipment and Precautions for Firefighters</b>	use water vapor, foam or fog. Firefighters should wear proper protective equipment.
<b>NFPA</b>	<b>Health Hazard</b> 0 <b>Flammability</b> 0 <b>Stability</b> 0 <b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 2 <b>Flammability</b> 0 <b>Physical Hazard</b> 0 <b>Personal protection</b> X

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Ensure adequate ventilation
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so
<b>Methods for cleaning up</b>	Absorb with an inert material and put spilled material in appropriate waste disposal Wear appropriate protective equipment

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	KEEP OUT OF REACH OF CHILDREN Avoid contact with skin, eyes and clothing Avoid breathing vapors or mists Keep container closed Wash thoroughly after handling
<b>Technical measures/Storage conditions</b>	Keep containers tightly closed in a cool, well-ventilated place Store away from incompatible materials

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
Potassium hydroxide 1310-58-3	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Sodium metasilicate 6834-92-0		2mg/m <sup>3</sup>	

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### **Personal Protective Equipment Institutional Environment**

**Eye/Face Protection** Safety glasses are suggested when using this product in heavy use and institutional environments.

**Consumer Environments** Care should be taken to avoid Eye contact.

**Skin and body protection** Rubber gloves

**Respiratory protection** Unnecessary in open institutional environment.

**Hygiene measures** Practice good personal hygiene. Wash after handling.

### **Personal Protective Equipment Industrial Environment**

**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** Practice good personal hygiene. Wash after handling. Shower at end of work period  
Practice good personal hygiene. Wash after handling

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Glycol
<b>Appearance</b>	Clear Liquid	<b>Odor Threshold</b>	No information available
<b>Color</b>	clear blue		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Methods</b>
<b>pH</b>	13.1-13.5	No information available	
<b>Melting/freezing point</b>		No information available	
<b>Freezing Point</b>		No information available	
<b>Boiling point/boiling range</b>	212 °F	No information available	
<b>Flash Point</b>		No information available	
<b>Evaporation rate</b>	>1	No information available	
<b>Flammability (solid, gas)</b>		No information available	
<b>Flammability Limits in Air upper flammability limit</b>		No information available	

**lower flammability limit****Explosion Limits**

upper

lower

**Vapor pressure**

No information available

**Vapor density**

No information available

**Specific Gravity**

1.05-1.09

No information available

**Water solubility**

Completely soluble.

No information available

**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****Explosive properties**

No information available

**Oxidizing Properties**

No information available

**9.2 Other information****Softening point**

No information available

**Molecular Weight**

No information available

**VOC Content(%)**

8

**Density VALUE**

No information available

**Bulk Density VALUE**

No information available

**10. STABILITY AND REACTIVITY****Stability**

Stable

**Incompatible products**

Oxidizing agents Strong acids

**Conditions to Avoid**

None known based on information supplied

**Hazardous Decomposition Products** Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)**Hazardous Polymerization**

Hazardous polymerization does not occur

**11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

**LD50 Oral VALUE (mg/kg)**

1746 mg/kg Rat

**LD50 Dermal VALUE**

680 mg/kg Rabbit

**LC50 Inhalation (VAPOR) VALUE**

450 ppm 4 hours Rat female

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Butoxyethanol	470 mg/kg ( Rat )	220 mg/kg ( Rabbit ) 2270 mg/kg ( Rat )	2.21 mg/L ( Rat ) 4 h 450 ppm ( Rat ) 4 h
Potassium hydroxide	214 mg/kg ( Rat )		
Tetrasodium EDTA	10 g/kg ( Rat )		
Sodium metasilicate	600 mg/kg ( Rat )		
Tetrapotassium pyrophosphate		4640 mg/kg ( Rabbit )	

**Chronic toxicity**

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol	A3	Group 3		

**Target Organ Effects** None known.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2-Butoxyethanol		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 >1000: 48 h Daphnia magna mg/L EC50
Potassium hydroxide		80: 96 h Gambusia affinis mg/L LC50 static		
Tetrasodium EDTA	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static		
Sodium metasilicate		210: 96 h Brachydanio rerio mg/L LC50 210: 96 h Brachydanio rerio mg/L LC50 semi-static		216: 96 h Daphnia magna mg/L EC50
Tetrapotassium pyrophosphate		100: 96 h Oncorhynchus mykiss mg/L LC50		

Chemical Name	log Pow
2-Butoxyethanol	0.81
Potassium hydroxide	0.83

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Liquid wastes are not permitted in landfill. Consult local, state, and federal agencies for proper disposal in your area.

**Contaminated packaging** Do not re-use empty containers

Chemical Name	California Hazardous Waste Status
Potassium hydroxide	Toxic Corrosive

## 14. TRANSPORT INFORMATION

**Note** corrosive liquid n.o.s. (potassium hydroxide)

**Dot Proper shipping name** Regulated  
corrosive liquid n.o.s. (potassium hydroxide)

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

<u>ICAO/IATA</u>	Not regulated
<u>IMDG / IMO</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	TSCA
<b>DSL</b>	Complies
<b>NDSL</b>	Complies
<b>EINECS</b>	Complies
<b>ELINCS</b>	-
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

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

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

**EINECS/ELINCS** - European Inventory of Existing 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

SARA 313 toxic chemical notification and release reporting - regulated substance: 2-butoxy ethanol

#### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	no
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	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).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

#### 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.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Potassium hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

### International Regulations

Chemical Name	Carcinogen Status	Exposure Limits
2-Butoxyethanol		Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>

### Canada

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

Chemical Name	NPRI
2-Butoxyethanol	X

## 16. OTHER INFORMATION

**Prepared By** Swisher Hygiene Inc.  
 4725 Piedmont Row Drive  
 Suite 400  
 Charlotte, NC 28210  
**Issuing date** 07-Oct-2011  
**Revision Date** 24-Oct-2011  
**Revision Note** No information available  
**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

**End of Material Safety Data Sheet**