Material Safety Data Sheet

Issuing date 07-Oct-2011 **Revision Date** 24-Oct-2011 **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 %

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

Eye contact Flush with flowing water for 15 minutes & see physician.

Skin contact Wash contaminated area with soap or mild detergent. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.

Inhalation Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.

Ingestion 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.

Notes to physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable

Flash point none

Suitable Extinguishing Media Use water vapor, foam or fog. Firefighters should ware proper protective equipment.

Explosion Data
Sensitivity to Mechanical Impact none
Sensitivity to Static Discharge none

Protective Equipment and Precautions for Firefighters use water vapor, foam or fog. Firefighters should wear proper protective equipment.

NFPA	**Health Hazard** 0	**Flammability** 0	**Stability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2	**Flammability** 0	**Physical Hazard** 0	**Personal protection** X

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Ensure adequate ventilation

Environmental precautions Try to prevent the material from entering drains or water courses

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

Methods for cleaning up Absorb with an inert material and put spilled material in appropriate waste disposal Wear appropriate protective equipment

7. HANDLING AND STORAGE

Advice on safe handling 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

Technical measures/Storage conditions 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/m³ S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m³
Potassium hydroxide 1310-58-3	2 mg/m³	2 mg/m³	Ceiling: 2 mg/m³
Sodium metasilicate 6834-92-0		2mg/m³	

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 enviroment.
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 protecetive 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

Physical state liquid
Appearance Clear Liquid
Color clear blue
Odor Glycol
Odor Threshold No information available

Property	Values	Remarks Methods
pH	13.1-13.5	No information available
Melting/freezing point		No information available
Freezing Point		No information available
Boiling point/boiling range	212 °F	No information available
Flash Point		No information available
Evaporation rate	>1	No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit		

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_2)

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 Regulated

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

TDG Not regulated

MEX Not regulated

ICAO Not regulated

ICAO/IATA	Not regulated
IMDG / IMO	Not regulated
RID	Not regulated
ADR/RID	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories

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

Acute Health Hazard	no
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).

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^3 Mexico: STEL 75 ppm Mexico: STEL 360 mg/m^3

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.
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Suite 400
Charlotte, NC 28210
Issuing date 07-Oct-2011
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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