

MATERIAL SAFETY DATA SHEET

KEL 9400

1. Product and Company Identification

Product number 080-001P
Product name Aerosol Utility Cleaner
Effective date 06-May-2010
Company information Kelsan Inc
5109 National Dr
Knoxville, TN 37914 United States
Company phone General Assistance 865-525-7132
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 03
Supersedes date 11-Jan-2010

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.
Harmful in contact with eyes.

Potential health effects

Routes of exposure Eye contact. Inhalation. Skin contact. Ingestion.

Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury.

Skin This product may be harmful if it is absorbed through the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Kidneys.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.

Chronic effects Blood. Central nervous system. Lungs.
Conjunctiva. May be harmful if absorbed through skin. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Prolonged skin contact may defat the skin and produce dermatitis. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility.

Signs and symptoms Discomfort in the chest. Corneal damage. Narcosis. Cyanosis. Defatting of the skin. Birth defects. Sterility. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Butane	106-97-8	1 - 3
Ethyl Alcohol	64-17-5	1 - 3
Propane	74-98-6	1 - 3
2-Butoxyethanol	111-76-2	0.5 - 1
Non-hazardous and other components below reportable levels		> 90

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

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Skin contact Immediately take off all contaminated clothing. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin.

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

Ingestion If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. Fire Fighting Measures

Flammable properties Heat may cause the containers to explode. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Protection of firefighters

Protective equipment and precautions for firefighters In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental Release Measures

Methods for containment Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.

Methods for cleaning up Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Wear personal protective equipment. Avoid prolonged exposure.

Storage Level 1 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and flame. Avoid exposure to long periods of sunlight. Store in cool place. Store in a well-ventilated place. Keep the container dry. Keep out of the reach of children. Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
n-Butane	106-97-8	1000 ppm	Not established	Not established
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Wear chemical goggles.
Skin protection	Wear appropriate chemical resistant clothing. Wear protective gloves.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties
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Appearance	Compressed liquefied gas.
Boiling point	203 °F (95 °C) estimated
Color	Clear. Colorless.
Flammability (HOC)	2.8698 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C)
Form	Aerosol.
Odor	Characteristic.
pH	9.7 - 10.7
Physical state	Liquid.
Pressure	60 - 60 psig @ 70F
Solubility	Partially
Specific gravity	0.962 estimated

10. Chemical Stability & Reactivity Information
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Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known.
Hazardous decomposition products	Irritants.

11. Toxicological Information

Acute effects	Acute LD50: 14712 mg/kg estimated, Rat, Dermal Acute LC50: 180 mg/l/4h estimated, Rat, Inhalation
Component analysis - LD50	
Toxicology Data - Selected LD50s and LC50s	
2-Butoxyethanol	111-76-2 Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg
Ethyl Alcohol	64-17-5 Oral LD50 Rat 7060 mg/kg
n-Butane	106-97-8 Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6 Inhalation LC50 Rat 658 mg/L 4 h
Carcinogenicity	Hazardous by OSHA criteria. Cancer hazard. Risk of cancer cannot be excluded with prolonged exposure.
IARC - Group 1 (Carcinogenic to Humans)	
Ethyl Alcohol	64-17-5 Monograph 96 [in preparation] (in alcoholic beverages)
Reproductive effects	Hazardous by OSHA criteria. Possible reproductive hazard. Can cause adverse reproductive effects - such as birth defects, miscarriages, and infertility.

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns. LC50 35388 mg/L estimated, Fish, 96.00 Hours, EC50 83046 mg/L estimated, Daphnia, 48.00 Hours, IC50 estimated, Algae, 72.00 Hours,
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13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F
Disposal instructions Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:
Proper shipping name Consumer commodity
Hazard class ORM-D
Subsidiary hazard class None
Additional information:
Packaging exceptions 156, 306
Packaging non bulk 156, 306
Packaging bulk None

IMDG

Basic shipping requirements:
Proper shipping name AEROSOLS
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required None



IATA

Basic shipping requirements:
Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required 2.1



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

2-Butoxyethanol	111-76-2	1.0 % de minimis concentration (applies to R-(OCH ₂ CH ₂) _n -OR', where n = 1, 2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)
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Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

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Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

U.S. - Pennsylvania - RTK (Right to Know) List

2-Butoxyethanol	111-76-2	Present
Ethyl Alcohol	64-17-5	Present
n-Butane	106-97-8	Present
Propane	74-98-6	Present

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1
 Flammability: 2
 Physical hazard: 0

Disclaimer

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

MSDS sections updated

This document has undergone significant changes and should be reviewed in its entirety.

Prepared by

Regulatory Compliance