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

Product identifier

Product name Cleaver

Other means of identification

Product Code FM9049
UN/ID No UN3266

Recommended use of the chemical and restrictions on use

Recommended use Oven & Grill Cleaner

Details of the supplier of the safety data sheet

Distributor
Accurate Companies

731 W. Fairmont Dr. Tempe, AZ 85282

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)
Company Phone Number 1-800-870-8508

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 Blue/Green **Physical state** Liquid **Odor** Surfactant

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
• May be harmful if swallowed
Unknown Acute Toxicity 2.2% 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
Potassium hydroxide	1310-58-3	5% -15%	*
2-Butoxyethanol	111-76-2	0.% - 3.5%	*

*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 Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. GET IMMEDIATE MEDICAL ATTENTION.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If skin irritation persists, see a physician.

Inhalation If qualified give oxygen or artificial respiration as needed.

Ingestion DO NOT induce vomiting. Give large amounts of water if victim is conscious. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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 Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide (CO_2). Alcohol-resistant foam. Dry chemical.

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
No information available.

Hazardous Combustion Products Carbon monoxide. Nitrogen oxides (NOx).

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

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

Environmental precautions

Environmental precautions Keep out of waterways. Neutralization is normally necessary before waste water is discharged into water treatment plants. 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.

Methods for cleaning up Mop up & flush neutralized material to sewer with plenty of water. Large spills: Dike or dam spill. Pump to containers or soak up on inert absorbent.

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 Acids, organohalogens, organonitro compounds, oxidizers, reactive metals (aluminum, zinc, tin, alloys containing these metals).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	2 mg/m³	2 mg/m³	Ceiling: 2 mg/m^3
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m^3

Legend
Skin - Skin Absorber
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. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state Liquid
Appearance Opaque
Color Blue Green
Odor Surfactant
Odor Threshold No information available

Property	Values	Remarks • Methods
pH	13.5-14.5	
Melting/freezing point	No information available	
Boiling point/boiling range	NA	
Flash Point	No information available	

Evaporation rate	Similar to Water	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	NE	
Vapor density	NE	
Specific Gravity	1.05 - 1.08	
Water solubility	Miscible with water	Miscible
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	N/A
Molecular Weight	N/A
VOC Content(%)	< 5%
Density VALUE	N/A
Bulk Density VALUE	N/A

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Prolonged contact with aluminum, tin, zinc, or lead may produce flammable hydrogen gas.

Incompatible Materials
Acids, organohalogens, organonitro compounds, oxidizers, reactive metals (aluminum, zinc, tin, alloys containing these metals).

Hazardous Decomposition Products
May emit toxic fumes under fire conditions. Carbon monoxide (CO). Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes severe skin burns and eye damage
Inhalation	Severe respiratory irritant.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Contact causes severe skin irritation and possible burns. May be absorbed through the skin in harmful amounts.
Ingestion	Severe irritation of the gastrointestinal tract, causing vomiting, nausea and burns.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation

Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h

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
2-Butoxyethanol 111-76-2	A3	Group 3	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
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 information available. Avoid repeated exposure.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 2.2% 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) 3301 mg/kg
ATEmix (inhalation-dust/mist) 150 mg/l
ATEmix (inhalation-vapor) 45000 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

2.7% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-
2-Butoxyethanol 111-76-2	-	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

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical Name	Partition coefficient
Potassium hydroxide 1310-58-3	0.65 0.83
2-Butoxyethanol 111-76-2	0.81

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
Potassium hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT Regulated

UN/ID No	UN3266
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
Hazard class	8
Packing Group	II
Emergency Response Guide Number	154

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
2-Butoxyethanol - 111-76-2	1.0

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
Potassium hydroxide 1310-58-3	1000 lb	-	-	X

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
Potassium hydroxide 1310-58-3	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

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X
2-Butoxyethanol 111-76-2	X	X	X

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 Accurate Companies 731 W. Fairmont Dr Tempe, AZ 85282
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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