

Material Safety Data Sheet: BACTICIDE 45B, CM

Supersedes Date 05/18/2010

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name BACTICIDE 45B, CM
Recommended use Biocidal product
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 0684
Chemical nature Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER

Corrosive

Causes skin and eye burns
May cause allergic skin reaction
May cause delayed lung injury and burns
May cause allergic respiratory reaction
Harmful or fatal if swallowed

Color Colorless

Physical State Liquid

Odor Fruity

Potential Health Effects

Principle Route of Exposure

Primary Routes of Entry

Acute Effects

Eyes

Skin

Inhalation

Ingestion

Chronic Toxicity

Target Organ Effects

Aggravated Medical Conditions

Potential Environmental Effects

Skin contact, Eye contact, Inhalation.

Skin Absorption, Ingestion.

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

Causes skin burns. May cause allergic skin reaction. May be absorbed through the skin in harmful amounts.

Harmful by inhalation. Causes burns. May cause allergic respiratory reaction.

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May cause central nervous system effects such as headache, dizziness, weakness, staggering gait, nausea, blurred vision, excitation, and in extreme cases, coma or death.

May cause sensitization by skin contact. May cause respiratory sensitization in some individuals. Liver injury may occur. Contains a known or suspected reproductive toxin.

Respiratory system, Central nervous system, Immune system, Liver, Skin.

Respiratory disorders, Skin disorders, Liver disorders, Neurological disorders.

See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Glutaraldehyde	111-30-8

4. FIRST AID MEASURES

General advice

Eye Contact

Skin Contact

Inhalation

Ingestion

Notes to physician

Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist.

If in eyes, rinse with water for 15 minutes. Remove contact lenses. Call a physician or poison control center immediately.

Take off all contaminated clothing immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Move to fresh air. Give oxygen or artificial respiration if needed. Call a physician or poison control center immediately.

Call a physician or poison control center immediately. Do NOT induce vomiting. Rinse mouth.

Aspiration hazard if swallowed - can enter lungs and cause damage. Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsions may be needed. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Flash Point > 201 °F / > 94 °C

Autoignition Temperature No information available.

Flammability Limits in Air % Hydrogen, by reaction with metals.

Suitable Extinguishing Media

Method

Upper 75

Closed cup

Lower 4

Foam, Alcohol-resistant foam, Carbon dioxide (CO₂). Dry chemical, Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Contact with metals liberates flammable hydrogen gas. Material can create slippery conditions.

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.

NFPA	Health 3	Flammability 1	Instability 0
HMIS	Health 3	Flammability 1	Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13)
Methods for Cleaning Up	Pick up and transfer to properly labeled containers
Neutralizing Agent	Not applicable.

7. HANDLING AND STORAGE

Handling	Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist.
Storage	Keep away from open flames, hot surfaces and sources of ignition. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.
Storage Temperature	Minimum 25 °F / -4 °C Maximum 100 °F / 38 °C
Storage Conditions	Indoor X Outdoor Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Glutaraldehyde	Ceiling: 0.05 ppm	No data available	Ceiling: 0.2 ppm Ceiling: 0.8 mg/m ³

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment	
Eye/Face Protection	Tightly fitting safety goggles. Face-shield.
Skin Protection	Wear suitable protective clothing, impervious gloves.
Respiratory Protection	In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General Hygiene Considerations	Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Colorless	Odor	Fruity
Appearance	Transparent	pH	3.1
Specific Gravity	1.12	Evaporation Rate	1.0 (Butyl acetate=1)
Percent Volatile (Volume)	100	VOC Content (%)	45.5
VOC Content (g/L)	509	Vapor Pressure	0.2 mmHg @ °F
Vapor Density	1.0 (Air = 1.0)	Solubility	Completely soluble
Boiling Point/Range	213 °F / 101 °C		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames, and sparks
Incompatible Products	Strong oxidizing agents, Bases, Amines, Metals, Strong acids.
Hazardous Decomposition Products	Carbon oxides
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral rat 1,330 mg/kg	LD50 Dermal rabblt 1,810 - 3,164 mg/kg
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Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Dralze Test	Other
Glutaraldehyde	= 66 mg/kg (Rat)	> 2000 mg/kg (Rat) = 560 µL/kg (Rabbit)	= 0.1 mg/L (Rat) 4 h	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Glutaraldehyde	no data available	skin sensitization, respiratory sensitization	X	no data available	eyes, respiratory system, skin, immune system, liver, CNS

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Glutaraldehyde	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information Toxic to aquatic organisms

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Glutaraldehyde	EC50 = 0.61 mg/L Desmodesmus subspicatus 72 h EC50 = 0.84 mg/L Desmodesmus subspicatus 96 h	LC50 7.8 - 22 mg/L Lepomis macrochirus 96 h LC50 2.6 - 4.8 mg/L Oncorhynchus mykiss 96 h LC50 7.8 - 13 mg/L Oncorhynchus mykiss 96 h LC50 = 5.4 mg/L Pimephales promelas 96 h	EC50 = 13.3 mg/L 17 h EC50 = 76.0 mg/L 5 min	EC50 = 14 mg/L 48 h EC50 = 0.56 - 1.0 mg/L 48 h	0.22

Persistence and Degradability Readily biodegradable.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
UN-No UN2922
Packing Group II
Description UN2922, Corrosive liquid, toxic, n.o.s.,(Glutaraldehyde), 8 (6.1), PG II

TDG

Proper shipping name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
UN-No UN2922
Packing Group II
Description UN2922, Corrosive liquid, toxic, n.o.s.,(Glutaraldehyde), 8 (6.1), PG II

ICAO

UN-No UN2922
Proper Shipping Name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group II

Shipping Description UN2922, Corrosive liquid, toxic, n.o.s.,(Glutaraldehyde), 8 (6.1), PG II

IATA

UN-No UN2922
 Proper Shipping Name Corrosive liquid, toxic, n.o.s.
 Hazard Class 8
 Subsidiary Hazard Class 6.1
 Packing Group II
 Shipping Description UN2922, Corrosive liquid, toxic, n.o.s.,(Glutaraldehyde), 8 (6.1), PG II

IMDG/IMO

Proper Shipping Name Corrosive liquid, toxic, n.o.s.
 Hazard Class 8
 Subsidiary Hazard Class 6.1
 UN-No UN2922
 Packing Group II
 Shipping Description UN2922, Corrosive liquid, toxic, n.o.s.,(Glutaraldehyde), 8 (6.1), PG II

15. REGULATORY INFORMATION

Inventories

TSCA Complies
 DSL Complies

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 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Glutaraldehyde	Not applicable	Not applicable

Canada

This product is exempt from WHMIS due to PCP registration

WHMIS Hazard Class

Exempt

16. OTHER INFORMATION

Prepared By Rachael Mohochi
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 Reason for Revision No information available.
 Glossary No information available.
 List of References. No information available.

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