

SAFETY DATA SHEET

Date Issued : 02/01/2019

SDS No. : Bio-Dex Knock Out Problems Algae

Knock Out Problems Algaecide

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Knock Out Problems Algaecide

PRODUCT DESCRIPTION: Inorganic bromide

ACTIVE INGREDIENT(S): Sodium Bromide

DISTRIBUTOR

Bio-Dex Laboratories, LLC.

4212 W. Innovative Drive

Phoenix, AZ 85086

Product Stewardship: 800-617-3477

Web: www.bio-dex.com

2. HAZARDS IDENTIFICATION

GHS LABEL

This product is not classified as hazardous according to the Globally Harmonized System (GHS)

PRECAUTIONARY STATEMENT(S)

General:

8219D4CW: This product is not classified as hazardous according to the Globally Harmonized System.

POTENTIAL HEALTH EFFECTS

INGESTION: May be harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS |
|----------------|------|-----------|
| Sodium Bromide | 40 | 7647-15-6 |

4. FIRST AID MEASURES

EYES: Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes. Call a physician immediately.

SKIN: Immediately wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: Wash mouth with plenty of water. Get medical attention immediately.

INHALATION: Remove to fresh air. Consult a physician.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Mild irritant.

SKIN: Not an irritant to intact skin. Slight irritant on prolonged contact to a braded skin.

INGESTION: Abdominal pain, nausea and vomiting. May cause sleepiness, muscular coordination and respiratory depression.

INHALATION: Irritant to upper respiratory tract.

NOTES TO PHYSICIAN: Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not combustible.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

FIRE FIGHTING PROCEDURES: Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.

FIRE EXPLOSION: Will decompose from ca. 800 deg. C releasing poisonous and corrosive fumes of bromine, hydrogen bromide and sodium oxide.

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6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Do not touch spilled material. Minimize airborne spreading of vapors. Clean up spill immediately. Contain and/or absorb spill with inert material (e.g., sand or vermiculite). Flush spill area with water. Use appropriate containers to avoid environmental contamination.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling.
STORAGE: Store in a cool dry place. Do not reuse container. Keep away from strong acids and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | |
|---|-----------|-----|-----|-------------------|
| EXPOSURE LIMITS | | | | |
| Chemical Name | Type | | ppm | mg/m ³ |
| Sodium Bromide | OSHA PEL | TWA | [1] | [1] |
| | ACGIH TLV | TWA | [1] | [1] |
| Footnotes: 1. Not established. | | | | |

ENGINEERING CONTROLS: Local exhaust.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses recommended.

SKIN: Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

RESPIRATORY: Not required, except in case of aerosol formation.

PROTECTIVE CLOTHING: Body covering clothes and boots.

WORK HYGIENIC PRACTICES: Wash after handling and before eating or smoking. Do not eat, smoke or drink where material is handled, processed or stored.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: None.

APPEARANCE: Blue liquid.

pH: 6.8

FLASHPOINT AND METHOD: Not Flammable

FLAMMABLE LIMITS: 0 to 0

VAPOR PRESSURE: 17.5 mm of Hg @ 20 deg C

VAPOR DENSITY: Not Determined.

BOILING POINT: 112°C (234°F)

SOLUBILITY IN WATER: Miscible

EVAPORATION RATE: Not Available

SPECIFIC GRAVITY: 1.41

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10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable.

CONDITIONS TO AVOID: Heating above decomp temperature of 800 deg C.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen bromide and sodium oxide.

INCOMPATIBLE MATERIALS: Acids, heavy metal salts, bromine trifluoride, oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

ORAL LD₅₀: 7000 mg/kg (mice)

NOTES: Oral TDLO: 3150 mg/kg (6 weeks, continuous, rat)

Subcutaneous LD50: 5020 mg/kg (mouse)

GERM CELL MUTAGENICITY: Does not induce DNA repair in cultured human epithelial cells. Not clastogenic in human lymphocytes metaphase analysis. Not mutagenic by the Ames test.

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

REPRODUCTIVE TOXICITY: Sodium bromide has been shown to cause embryo-fetal toxicity and malformations in rats at dose levels which also produce maternal toxicity. The No-Observed Effect Level (NOEL) is 100 mg/kg per day, and the acceptable daily intake (ADI) for sodium bromide from food and drinking water in humans is 1 mg/kg per day. Comparable high doses of sodium chloride (table salt) similarly cause malformation, embryo-fetal toxicity, and maternal toxicity in mice.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: > 1000 mg/L (Rainbow Trout)

48-HOUR EC₅₀: > 1000 mg/L (Daphnia Magna)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

15. REGULATORY INFORMATION

UNITED STATES

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not regulated.

CERCLA RQ: No.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the

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classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Below you will find the hazard information that is required on the EPA pesticide label.

GENERAL COMMENTS: HAZARD INFO FOUND ON THIS PRODUCT'S LABEL, EPA Reg. No 46043-29

Prolonged Eye or Skin contact may cause severe irritation.

Harmful if absorbed through skin.

Toxic to fish and aquatic organisms.

EPA FIFRA APPROVED LABEL SIGNAL WORD - CAUTION

16. OTHER INFORMATION

Date Prepared: 02/01/2019

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