

**SAFETY DATA SHEET**  
**Bio-Oxygen Chem Decon Part A**

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Printed: 07/22/2022

Revision: 07/22/2022

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Bio-Oxygen Chem Decon Part A  
**Company Name:** Artemis Bio-Solutions, LLC  
14505 Torrey Chase Blvd Suite 205  
Houston, TX 77014  
**Email address:** info@artemisbiosolutions.com  
**Emergency Contact:** AAPCC Poison Help +1 (800)424-9300  
INFOTRAC (US Transportation) +1 (800)535-5053  
CANUTEC (Canadian Transportation) +1 (613)996-6666  
**Intended Use:** EPA-registered antimicrobial to be used with Bio-Oxygen Chem Decon Part B

## 2. HAZARDS IDENTIFICATION

**Serious Eye Damage/Eye Irritation, Category 1**

**Skin Corrosion/Irritation, Category 2**



**GHS Signal Word:** **Danger**  
**GHS Hazard Phrases:** H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
**GHS Precautionary Phrases:** P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
**GHS Response Phrases:** P302+352 - IF ON SKIN: Wash with plenty of soap and water. P362+364 - Take off contaminated clothing and wash it before reuse. P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician.  
**GHS Storage and Disposal Phrases:** P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS #      | Hazardous Components (Chemical Name)                            | Concentration |
|------------|---|---------------|
| 584-08-7   | Potassium carbonate   | 5.0 -15.0 %   |
| 57-55-6    | Propylene glycol  | 2.5 -7.5 %    |
| 68424-85-1 | Alkyl(C12-C16) dimethylbenzylammonium chloride                  | 3.2 %         |
| 34590-94-8 | Dipropylene glycol methyl ether                                 | 1.0 -3.0 %    |
| 8030-78-2  | Quaternary ammonium compounds, trimethyltallow alkyl, chlorides | 1.0 -4.0 %    |
| 68439-46-3 | Alcohol ethoxylate  | < 2.5 %       |
| 67-63-0    | Isopropyl alcohol   | <=1.0 %       |

**Additional Composition Information:** \*\*If Chemical Name/CAS No is "N/A" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST AID MEASURES

### Emergency and First Aid Procedures:

**In Case of Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid.

**In Case of Skin Contact:** Wash off with soap and plenty of water. Remove and wash contaminated clothing before reuse. If skin irritation or rash occurs, seek medical advice/attention.

**In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical attention immediately.

**In Case of Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and slowly drink several glasses of water. Get medical aid if irritation develops and persists.

**Note to Physician:** Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

## 5. FIRE FIGHTING MEASURES

**Flash Pt:** NA Method Used: Not Applicable

**Explosive Limits:** LEL: No data. UEL: No data.

**Autoignition Pt:** NA

**Suitable Extinguishing Media:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

**Fire Fighting Instructions:** Evacuate area and fight fire from a safe distance. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.

**Flammable Properties and Hazards:** Remove containers from fire area if you can do so without risk. Cool containers with water spray until well after the fire is out. Increases the flammability of readily oxidizable, combustible, and organic materials.

**Hazardous Combustion Products:** High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: nitrogen.

## 6. ACCIDENTAL RELEASE MEASURES

**Protective Precautions, Protective Equipment and Emergency Procedures:** Use proper personal protective equipment as indicated in Section 8.

**Environmental Precautions:** Avoid dispersal of spilled material and runoff from making contact with soil, waterways, drains and sewers. Do not allow uncontrolled discharge of product into the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

**Steps To Be Taken In Case Material Is Released Or Spilled:** Ensure adequate ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent further leakage or spillage if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Following product recovery, flush area with water.

## 7. HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** Keep away from heat, sparks and flame. Keep away from sources of ignition - No smoking. Avoid contact with eyes, skin, and clothing. Do not eat, drink, or smoke when using. Do not ingest or inhale. Wash thoroughly after handling.

**Precautions To Be Taken in Storing:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from heat, sparks and flame. Store in original container. Protect containers against

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damage. Keep container closed to prevent drying out. Protect from sunlight. Store at temperatures not exceeding 60°C/140°F.

**Other Precautions:** Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS #   | Chemical Name   | Jurisdiction | Recommended Exposure Limits  | Notations       |
|---|---|--------------|--|-----------------|
| 57-55-6   | Propylene glycol  | OSHA PELs    | PEL: 10 mg/m <sup>3</sup>  |                 |
| 34590-94-8  | Dipropylene glycol<br>methyl ether  | ACGIH TLV    | TLV: 100 ppm<br>STEL: 150 ppm  |                 |
|   |   | NIOSH        | TWA: 600 mg/m <sup>3</sup> (100 ppm)<br>STEL: 900 mg/m <sup>3</sup> (150 ppm)  | Skin Absorption |
| 67-63-0   | Isopropyl alcohol   | OSHA PELs    | PEL: 100 ppm   |                 |
|   |   | ACGIH TLV    | TLV: 200 ppm<br>STEL: 400 ppm  |                 |
|   |   | NIOSH        | TWA: 980 mg/m <sup>3</sup> (400 ppm)<br>STEL: 1225 mg/m <sup>3</sup> (500 ppm) |                 |
|   |   | OSHA PELs    | PEL: 400 ppm   |                 |
| <b>Respiratory Equipment<br/>(Specify Type):</b>          | Not required under normal conditions of use with adequate ventilation.  |              |  |                 |
| <b>Eye Protection:</b>                                    | Wear safety glasses with side shields. If splash is likely, goggles may be needed.  |              |  |                 |
| <b>Protective Gloves:</b>                                 | Wear appropriate protective gloves to prevent skin exposure.  |              |  |                 |
| <b>Other Protective Clothing:<br/>(Ventilation etc.):</b> | Wear appropriate protective clothing to minimize contact with skin.   |              |  |                 |
| <b>Engineering Controls<br/>(Ventilation etc.):</b>       | Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.      |              |  |                 |
| <b>Work/Hygienic/Maintenance<br/>Practices:</b>           | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.          |              |  |                 |
| <b>Environmental Exposure<br/>Controls:</b>               | Avoid discharge into drains, water courses or onto the ground. Do not allow uncontrolled discharge of product into the environment. |              |  |                 |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Solubility in Water:** Complete  
**Saturated Vapor Concentration:** Not available  
**Octanol/Water Partition Coefficient:** No data.  
**Autoignition Pt:** NA  
**Decomposition Temperature:** No data.  
**Viscosity:** Not available  
**Explosive Properties:** Not explosive.

**Information with regard to primary physical hazard:**

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive at normal temperatures and pressures.  
**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid -** Heat, flames and sparks. Extremes of temperature and direct sunlight.  
**Instability:** Stable under recommended handling and storage conditions.  
**Incompatibility - Materials To** Heavy metal salts, strong alkalis, combustible materials.  
**Avoid:**  
**Hazardous Decomposition or** High temperatures and fire conditions can result in the formation of carbon monoxide and  
**Byproducts:** carbon dioxide, toxic vapors/fumes of: amines, and oxides of: nitrogen.  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid -** No data available.  
**Hazardous Reactions:**

## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No information available.  
Teratogenicity: No information available.  
Reproductive Effects: No information available.  
Mutagenicity: No information available.  
Neurotoxicity: No information available.  
Other Studies: CAS# 67-63-0:  
Acute toxicity, LD50, Oral, Rat, 5045 mg/kg.  
Other Studies: CAS# 68424-85-1:  
Acute toxicity, LD, Oral, Rat, 426 mg/kg.  
Other Studies: CAS# 68439-46-3:  
Acute toxicity, LD50, Oral, Rat, 1378 mg/kg  
Acute toxicity, LD50, Skin, Rabbit, > 2 g/kg.  
**Irritation or Corrosion:** Causes skin irritation.  
Causes serious eye damage.  
**Symptoms related to Toxicological Characteristics:** Skin Contact: Prolonged and/or repeated contact may cause irritation and/or dermatitis.  
Inhalation: May cause respiratory tract irritation and coughing.  
Ingestion: May cause nausea and vomiting.  
Eye Contact: May cause severe irritation, tearing, and redness.  
**Sensitization:** Not expected.  
**Chronic Toxicological Effects:** May cause severe eye damage. If left untreated, may cause injury to the cornea.

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**Carcinogenicity:** NTP? No    IARC Monographs? No    OSHA Regulated? No

## **12. ECOLOGICAL INFORMATION**

|  |   |
|--|---|
| <b>General Ecological Information:</b>     | Environmental: No information available.<br>Physical: No information available.<br>Other Studies: CAS# 67-63-0:<br>LC50, Water Flea (Daphnia magna), 10000 mg/L, 24H<br>LC50, Fathead Minnow (Pimephales promelas), 6550000 ug/L, 96H.<br>Other Studies: CAS# 68424-85-1:<br>LC50, Rainbow trout (Oncorhynchus mykiss), 1.600ppm, 96H<br>LC50, Striped bass (Morone saxatilis), 2820 ug/L, fry, 24H.<br>Other Studies: CAS# 68439-46-3:<br>LC50, Fathead Minnow (Pimephales promelas), 8500 ug/L, 96 H. |
| <b>Results of PBT and vPvB assessment:</b> | No data available.  |
| <b>Persistence and Degradability:</b>      | No data available.  |
| <b>Bioaccumulative Potential:</b>          | No data available.  |
| <b>Mobility in Soil:</b>                   | No data available.  |

## **13. DISPOSAL CONSIDERATIONS**

|                               |  |
|-------------------------------|--|
| <b>Waste Disposal Method:</b> | Dispose of contents and containers in accordance with local, regional, national, and international regulations. Avoid discharge into drains, water courses or onto the ground. The generation of waste should be avoided or minimized whenever possible. |
|-------------------------------|--|

## **14. TRANSPORT INFORMATION**

### **LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** NOT REGULATED FOR DOMESTIC TRANSPORT.

**DOT Hazard Class:**

**UN/NA Number:**

## **15. REGULATORY INFORMATION**

### **EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

| <b>CAS #</b> | <b>Hazardous Components (Chemical Name)</b>                     | <b>S. 302 (EHS)</b> | <b>S. 304 RQ</b> | <b>S. 313 (TRI)</b> |
|--------------|---|---------------------|------------------|---------------------|
| 584-08-7     | Potassium carbonate   | No                  | No               | No                  |
| 57-55-6      | Propylene glycol  | No                  | No               | No                  |
| 68424-85-1   | Alkyl(C12-C16) dimethylbenzylammonium chloride                  | No                  | No               | No                  |
| 34590-94-8   | Dipropylene glycol methyl ether                                 | No                  | No               | No                  |
| 8030-78-2    | Quaternary ammonium compounds, trimethyltallow alkyl, chlorides | No                  | No               | No                  |
| 68439-46-3   | Alcohol ethoxylate  | No                  | No               | No                  |
| 67-63-0      | Isopropyl alcohol   | No                  | No               | Yes (1%)            |

### **EPA SARA Title III Section 313 Toxic Release Inventory.**

This product contains a toxic chemical or chemicals subject to the reporting requirements of EPCRA Section 313 (40 CFR Section 372).

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| <b>CAS #</b> | <b>Hazardous Components (Chemical Name)</b>                     | <b>Other US EPA or State Lists</b>   |
|--------------|---|--|
| 584-08-7     | Potassium carbonate   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 073504: Am/CC, Inert: F/NF; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No   |
| 57-55-6      | Propylene glycol  | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 068603: Am/CC, Inert: F/NF/Fr; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: No   |
| 68424-85-1   | Alkyl(C12-C16) dimethylbenzylammonium chloride                  | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; FIFRA: Yes - Active - 169135: CC, Inert: F/NF; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No  |
| 34590-94-8   | Dipropylene glycol methyl ether                                 | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A PAIR; FIFRA: Yes - Active - 011508: Am, Inert: F/NF/Fr; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: No  |
| 8030-78-2    | Quaternary ammonium compounds, trimethyltallow alkyl, chlorides | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Inert: F/NF; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No   |
| 68439-46-3   | Alcohol ethoxylate  | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Inert: F/NF/Fr; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No  |
| 67-63-0      | Isopropyl alcohol   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 047501: Am/Bio/CC, Inert: F/NF/Fr, 25(b) - 950(e): F/NF; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 1076; NY Part 597: No; PA HSL: Yes - E; SC TAP: No; WI Air: No |

**Regulatory Information:** PROPOSITION 65 (Chemicals known to the state of California to cause cancer or reproductive toxicity): This product may contain traces of: Benzyl chloride (CAS 100-44-7)

EPA Registration Number: 90920-1. This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**DANGER.** Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or spray mist. Wear protective eyewear such as goggles, face shield or safety glasses. Wear chemical resistant gloves. Wash thoroughly with soap and water after handling and before eating,

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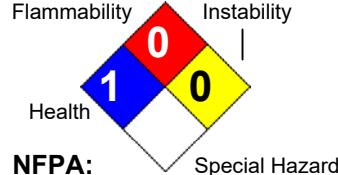
drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**16. OTHER INFORMATION**

**Revision Date:** 07/22/2022

**Previous revision:** 07/07/2020

**Hazard Rating System:**



**Additional Information:** 07/22/2022 Routine review and updates to section 1,2,3,4,5,11,12,15

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