SAFETY DATA SHEET
Bio-Oxygen Chem Decon Part B

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bio-Oxygen Chem Decon Part B

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 A

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

GHS Precautionary Phrases: P260 - Do not breathe mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P363 - Wash contaminated clothing before reuse.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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: P405 - Store locked up. 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
7722-84-1	Hydrogen peroxide	7.9 %
7664-38-2	Phosphoric acid	< 5.0 %

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 attention immediately.

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 water. Do not use dry chemicals or foams. CO2 or Halon may provide limited control.

Fire Fighting Instructions: Use extinguishing media appropriate for surrounding fire. 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: Decomposition produces oxygen which support combustion. Remove containers from fire area if you can do so without risk. Cool containers with water spray until well after the fire is out.

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

6. ACCIDENTAL RELEASE MEASURES

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

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground. Do not allow uncontrolled discharge of product into the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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: Use with adequate ventilation. 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. Keep away from sources of ignition - No smoking. Store away from oxidizers. Keep from freezing. Protect from sunlight. Protect containers

against damage. Keep container tightly closed when not in use. Ideal storage temperature is 60 - 68F.

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
7722-84-1	Hydrogen peroxide	ACGIH TLV	TLV: 1 ppm	
		NIOSH	TWA: 1.4 mg/m3 (1 ppm)	
		OSHA PELs	PEL: 1 ppm	
7664-38-2	Phosphoric acid	ACGIH TLV	TLV: 1 mg/m3 STEL: 3 mg/m3	
		NIOSH	TWA: 1 mg/m3 STEL: 3 mg/m3	
		OSHA PELs	PEL: 1 mg/m3	

Respiratory Equipment (Specify Type): Not required under normal conditions of use with adequate ventilation.

Eye Protection: Wear safety glasses with side shields. If splash is likely, goggles may be needed.

Protective Gloves: Wear appropriate gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Use with adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental Exposure Controls: 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

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: Appearance: Clear. Liquid. Colorless to pale yellow.
Odor: Odorless.

pH: 1 - 2

Melting Point: -2.00 C (28.4 F)

Boiling Point: 100.00 C (212.0 F)

Flash Pt: NA Method Used: Not Applicable

Evaporation Rate: Not available

Flammability (solid, gas): No data available.

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

Vapor Pressure (vs. Air or mm Hg): 20 MM_HG at 20.0 C (68.0 F)

Not available

Vapor Density (vs. Air = 1): 1.08 LB/CF

Specific Gravity (Water = 1): 1.03 - 1.04 at 20.0 C (68.0 F)

Density: 8.6 at 20.0 C (68.0 F)

Solubility in Water: Soluble

Saturated Vapor Concentration: Not available

Octanol/Water Partition Coefficient: No data.

Autoignition Pt: NA

Decomposition Temperature: No data.

Viscosity: Not available

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 - Instability: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Stable under recommended handling and storage conditions.

Incompatibility - Materials To Avoid: Heavy metals, Alkalis, combustible materials.

Hazardous Decomposition or Byproducts: High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: phosphorus, Decomposition produces oxygen which support combustion.

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

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# 7664-39-3:
Acute toxicity, LC50, Inhalation, Rat, 1276ppm, 1 H.
Other Studies: CAS# 7664-39-3:
Standard Draize Test, Eyes, Species:Human, 50 mg.

Other Studies: CAS# 7664-38-2:
Acute toxicity, LD50, Oral, Rat, 1530 mg/kg
Acute toxicity, LD50, Skin, Rabbit, 2740 mg/kg
Acute toxicity, LC50, Inhalation, Rat, 850.0 mg/m3, 1 H.
Other Studies: CAS# 7664-38-2:
Standard Draize Test, Eyes, Species:Rabbit, 119.0 mg.

Irritation or Corrosion:
Causes severe skin burns and eye damage.
Causes serious eye damage.

Symptoms related to Toxicological Characteristics:
Skin Contact: May cause severe irritation, local redness, and chemical burns, if untreated.
Inhalation: May cause respiratory tract irritation and coughing.
Ingestion: May cause nausea and vomiting.
Eye Contact: May cause severe irritation, tearing, and redness. May cause severe eye damage.

Chronic Toxicological Effects: May cause severe eye damage. If left untreated, may cause injury to the cornea.

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

12. ECOLOGICAL INFORMATION

General Ecological Information:
Environmental: No information available.
Physical: No information available.
Other Studies: CAS# 7664-38-2:
Not reported. Rainbow Trout (Oncorhynchus mykiss), fingerling, 5.190%, 27 W.
Other Studies: CAS# 7722-84-1:
LC50, Bluegill (Lepomis macrochirus), 26.7 ppm, 96H, juvenile
LC50, Rainbow trout (Oncorhynchus mykiss), 207 ppm, 2H, fry.

Results of PBT and vPvB assessment: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: 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

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7722-84-1	Hydrogen peroxide	Yes 1000 LB	No	No
7664-38-2	Phosphoric acid	No	Yes NA	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7722-84-1	Hydrogen peroxide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 000595: Am/Bio/CC, Inert: NF; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 1015; NY Part 597: Yes: HS; PA HSL: Yes - E; SC TAP: No; WI Air: Yes
7664-38-2	Phosphoric acid	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 076001: Am/CC, Inert: F/NF; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: No; NY Part 597: Yes: HS; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes

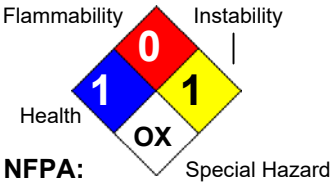
Regulatory Information: EPA Registration Number: 90920-2. This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information 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, 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:



NFPA:

Additional Information: 07/22/2022 Routine review and updates to section 1, 2, 3, 4, 5, 6, 8, 10, 11, 12

Company Policy or Disclaimer: This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.