

Safety Data Sheet

Issue Date: 14-Jan-2013

Revision Date: 30-Jan-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name BIO-OXYGEN MOLD 100 (PART B)

Other means of identification

SDS # ABS-006

Document MSDS NO. BOM100B

Recommended use of the chemical and restrictions on use

Recommended Use Not determined.

Details of the supplier of the safety data sheet

Manufacturer Address

Artemis Bio Solutions
960 N Industrial Dr Suite 4
Elmhurst IL 60126
www.Artemisbiosolutions.com

Emergency Telephone Number

Company Phone Number PH: 630-359-4090
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear colorless liquid **Physical State** Liquid **Odor** Slight acidic

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Signal Word

Danger

Hazard Statements

Causes serious eye damage
Causes skin irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a poison center or doctor/physician
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydrogen Peroxide	7722-84-1	7-8

If Chemical Name/CAS No is "proprietary" 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**First Aid Measures**

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Immediately flush with cool running water for 15 minutes, forcing eye lids open moving eye ball back and forth. Contact a physician immediately.
Skin Contact	Skin will turn white on contact, flush skin with plenty of cool running water for at least 15 minutes while removing any contaminated clothing. If irritation or redness develops contact a physician.
Inhalation	If inhaled remove to fresh air. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Immediately call a physician.
Ingestion	If swallowed, do not induce vomiting. Give victim a glass of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Causes skin irritation and serious eye damage. May cause irritation to the mucous membranes and upper respiratory tract.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Heating may cause an explosion.

Hazardous Combustion Products On decomposition product releases oxygen which may intensify fire.

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. Evacuate enclosed and surrounded areas, if smoke and fumes appear use water spray to cool containers. Keep spills away from a source of ignition. Use a proximity suit and self-contained breathing apparatus if smoke and fumes are present.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Avoid ignition sources.

Environmental Precautions Dike with sand or earth to contain spill. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Absorb with sand or other non-flammable material and transfer to an approved EPA dump for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Heavy metal ions, excessive alkalis, and combustible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen Peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³ (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m ³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³

Appropriate engineering controls

Engineering Controls Provide general and/or local exhaust ventilation to maintain airborne levels below the exposure limits. Refer to "Industrial Ventilation" by ACGIH for a manual of recommended practices.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use of safety glasses or goggles is recommended.

Skin and Body Protection SKIN PROTECTION: If skin or contamination of clothing is likely, protective clothing should be worn such as eye protection and rubber gloves.
 PROTECTIVE GLOVES: Use chemical resistant gloves.

Respiratory Protection Atmospheric levels should be maintained below the exposure limits by using engineering controls. If not feasible, use approved full face piece air-purifying respirator.

General Hygiene Considerations Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Slight acidic
Appearance	Clear colorless liquid	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	-2 °C / 25 °F	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	Does Not Flash	
Evaporation Rate	1	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not available	
Specific Gravity	1.03 – 1.04 (~8.6 lb/gal)	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not an explosive	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity
 Not reactive under normal conditions.

Chemical Stability
 Stable under recommended storage conditions.

Possibility of Hazardous Reactions
 None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Heavy metal ions, excessive alkalis, and combustible materials.

Hazardous Decomposition Products

Oxygen which supports combustion.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact	Causes serious eye damage.
Skin Contact	Causes skin irritation.
Inhalation	Avoid inhalation of vapors.
Ingestion	Ingestion may cause irritation to mucous membranes.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen Peroxide 7722-84-1	= 801 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 2 g/m ³ (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms	EFFECTS OF OVEREXPOSURE: Contact of the skin with hydrogen peroxide may cause skin irritation. Contact of the eye may cause eye irritation with tearing or blurring of vision. Inhalation may include irritation of the upper respiratory passages: nausea, headache or weakness. Ingestion may include irritation of the gastrointestinal internal tract abdominal pain.
-----------------	---

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.
------------------------	---

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen Peroxide 7722-84-1	A3	Group 3		

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrogen Peroxide 7722-84-1		16.4: 96 h Pimephales promelas mg/L LC50 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static 10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static		18 - 32: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Hydrogen Peroxide 7722-84-1	Toxic Corrosive Ignitable Reactive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Not determined

Legend:

TSCA - 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 Chemical Substances/European 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

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrogen Peroxide 7722-84-1		1000 lb	

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

CWA (Clean Water Act)

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrogen Peroxide 7722-84-1	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 1	Flammability 0	Instability 0	Special Hazards OX
<u>HMIS</u>	Health Hazards Not determined	Flammability Not determined	Physical Hazards Not determined	Personal Protection Not determined

Issue Date: 14-Jan-2013
Revision Date: 30-Jan-2014
Revision Note: New format

Disclaimer

The information provided in this 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