

Safety Data Sheet

Issue Date: 01-Jan-2013

Revision Date: 30-Jan-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name BIO-OXYGEN MOLD 100 (PART A)

Other means of identification

SDS # ABS-005

Document MSDS NO. BOM100A

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 to straw liquid

Physical State Liquid

Odor Slight soapy odor

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of cationic and nonionic detergents and carbonates.

Chemical Name	CAS No	Weight-%
N-alkyl (c12-c16)-n, n-dimethyl-n-benzyl ammonium Chloride	68391-01-5	3-4
Quaternary ammonium compounds, pentamethyltallow alkyltrimethylenedi-, dichlorides	68607-29-4	1-2

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	EYE EFFECTS: Contact may cause moderate irritation. Prolonged eye contact may cause damage to the eye. SKIN EFFECT: Contact with skin may cause irritation prolonged contact may cause redness. INGESTION: May cause irritation to mucus membranes.
-----------------	---

Indication of any immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water, Carbon Dioxide, or Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not combustible or an explosive.

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.

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 | Anionic detergents. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | |
|-----------------------------------|--|
| <u>Exposure Guidelines</u> | No exposure limits noted for ingredient(s) |
|-----------------------------------|--|

Appropriate engineering controls

- | | |
|-----------------------------|---|
| Engineering Controls | Showers
Eyewash stations
Ventilation systems. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

- | | |
|---------------------------------------|--|
| Eye/Face Protection | Not required, but for maximum protection, safety goggles are 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: Not required, but for maximum protection, neoprene gloves are recommended. |
| Respiratory Protection | Ensure adequate ventilation, especially in confined areas. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Slight soapy odor
Appearance	Clear to straw liquid	Odor Threshold	Not determined
Color	Clear to straw		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	-1 °C / 28 °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	1.09 – 1.11 (~9.2 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

Anionic detergents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	May cause mild eye irritation.
--------------------	--------------------------------

Skin Contact	Causes mild skin irritation.
Inhalation	Avoid inhalation of vapors.
Ingestion	Ingestion may cause irritation to mucous membranes.

Component Information Not available

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information Not available

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.

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	Not regulated

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****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

US State Regulations**U.S. State Right-to-Know Regulations**

Not determined

16. OTHER INFORMATION

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

Issue Date: 01-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