



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team
Zep Inc.

Date Prepared: 07/07/2020

SDS No: 230065

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Bio-Oxygen® Chem Decon- Part A

GENERAL USE: Proprietary Chemical and Biological Decontaminate Part A

PRODUCT DESCRIPTION: Neutralization of chemical and biological toxins when used with Bio-Oxygen® CHEM DECON PART B

PRODUCT CODE: 23065

MANUFACTURER

Artemis Bio-Solutions, LLC
14505 Torrey Chase Blvd Suite 205
Houston, TX 77014, USA

Emergency Contact: INFOTRAC

Emergency Phone: 1(800) 535-5053

Alternate Emergency Phone: 1(352) 323-3500

Customer Service : 1 (630) 359-4090

E-Mail: info@artemisbiosolutions.com

24 HR. EMERGENCY TELEPHONE NUMBERS

AAPCC Poison Help: (800) 424-9300

CANUTEC (Canadian Transportation): (613) 996-6666

INFOTRAC (US Transportation) : (800) 535-5053

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2

Eye Irritation, Category 2

Environmental:

Aquatic Toxicity, Category 3

GHS LABEL



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H319: Causes serious eye irritation.

H315: Causes skin irritation.

PRECAUTIONARY STATEMENTS

Prevention:

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363: Wash contaminated clothing before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice/attention.

Date Prepared: 07/07/2020

SDS No: 230065

Storage:

P402+P404: Store in a dry place. Store in a closed container.

Disposal:

P501: Disposal should be in accordance with applicable regional, national and local laws and regulations

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
N-alkyl (c12-18)-n,n'-dimethyl-n-benzylammonium Chloride	3 - 4	68391-01-5
Quaternary Ammonium Cpd's., N,n,n,n',n'- Pentamethyl-n'-tallow Alkyl Trimethylenedi-, Chlorides	1 - 2	68607-29-4

COMMENTS: Formulation is based on weight % 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 eyes with plenty of water for 15 minutes. Get medical attention, if irritation persists
Skin Contact	Extended contact may cause irritation or defatting. Flush skin with water for 15 minutes. Get medical attention for any irritation that persists
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.
Ingestion	May cause a gastric disturbance. Drink lots of water or preferably, milk or juices. Do not induce vomiting. Get medical attention if effects persist.
Most important symptoms and effects	
Symptoms	<p>EYES: Adverse symptoms may include pain or irritation, watering, and redness.</p> <p>SKIN: Adverse symptoms may include irritation and redness.</p> <p>INGESTION: Adverse symptoms may include nausea and vomiting.</p> <p>INHALATION: Adverse symptoms may include respiratory tract irritation and coughing.</p>
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Unsuitable Extinguishing Media	Not determined
Specific Hazards Arising from the Chemical	Product is not combustible or an explosive.
Protective equipment and precautions for firefighters	Promptly remove all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Increases the flammability of combustible, organic and readily oxidizable materials.
Hazardous Decomposition Products	None known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Wear protective gloves/protective clothing/eye protection/face protection.
Environmental Precautions	Avoid dispersal of spilled material and runoff and contact with waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers or waterways). GENERAL PROCEDURES: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Water polluting material. May be harmful to the environment if released in large quantities.

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	SMALL SPILL: Stop leak if without risk. Move containers from spill area. Dilute with water and mop if water-soluble. Alternately, or if water-soluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. LARGE SPILL: Dike area to contain spill. Wash the spill site with water. See section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Use only in a well ventilated area. Do not get in eyes. Do not swallow. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See section 8, Exposure Controls and Personal Protection.
--------------------------------	--

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store in accordance with local regulations. Store in a segregated and approved area in original container protected from sunlight in a dry, cool and well-ventilated and approved area away from incompatible materials. Keep container closed to prevent drying out. Move container away from oxidizing materials. Use appropriate containment to avoid environmental contamination.
---------------------------	---

Date Prepared: 07/07/2020

SDS No: 230065

Incompatible Materials

STORAGE TEMPERATURE: Store in a cool place below (140) F (60) C.
None known based on the information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	No exposure limits noted for ingredient(s). The following information is given as general guidance
Appropriate engineering controls	
Engineering Controls	No exposure limits noted for ingredient(s).
Individual protection measures, such as personal protective equipment	
Eye/Face Protection	<i>Distribution, Workplace and Household Settings:</i> No special protective equipment required. <i>Product Manufacturing Plant (needed at Product-Producing Plant ONLY):</i> Use appropriate eye protection,
Hand Protection	<i>Distribution, Workplace and Household Settings:</i> No special protective equipment required <i>Product Manufacturing Plant (needed at Product-Producing Plant ONLY):</i> Protective gloves
Skin and Body Protection	<i>Distribution, Workplace and Household Settings:</i> No special protective equipment required <i>Product Manufacturing Plant (needed at Product-Producing Plant ONLY):</i> Wear suitable protective clothing
Respiratory Protection	<i>Distribution, Workplace and Household Settings:</i> No special protective equipment required <i>Product Manufacturing Plant (needed at Product-Producing Plant ONLY):</i> In case of inadequate ventilation wear respiratory protection
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
Appearance	Clear to straw liquid
Color	Clear to straw
Odor	Slightly soapy odor
Odor Threshold	Not Determined
Property	Values
pH	10.0-12
Melting Point/Freezing Point	-1 °C / 28 °F
Boiling Point/Boiling Range	100 °C / 212 °F
Flash Point	Not Applicable
Evaporation Rate	1
Flammability (Solid, Gas)	Not Flammable
Upper Flammability Limits	N/A
Lower Flammability Limit	N/A
Vapor Pressure	20 mmHg@20°C (68 °F)
Vapor Density	1.08 lb/ft ³
Specific Gravity	1 to 1.020 at 20°C (68°F)
Density	8.4 at 20°C (68°F)
Water Solubility	Completely soluble in water
Solubility in other solvents	N/A
Partition Coefficient	N/A
Auto-ignition Temperature	N/A

Decomposition Temperature	N/A
Kinematic Viscosity	N/A
Dynamic Viscosity	N/A
Explosive Properties	Not an explosive
Oxidizing Properties	N/A

10. STABILITY AND REACTIVITY

Reactivity	Normally reactive if handled properly
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	Thermal decomposition may produce toxic vapors/fumes of amines and other organic materials, and oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	The ingredients are deemed non-corrosive by DOT regulations. May cause redness and irritation to the skin.
Inhalation	Not applicable
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
NA	NA	-	-
NA	NA	-	-

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	Based on the information provided, 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

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

Date Prepared: 07/07/2020

SDS No: 230065

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Chemical Name	CAS
N-alkyl (c12-18)-n,n,-dimethyl-n-benzylammonium Chloride	68391-01-5
Quaternary Ammonium Cpds., N,n,n,n',n'-Pentamethyl-n'-tallow Alkyl Trimethylenedi-, Chlorides	68607-29-4

DSL/NDL - 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

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Not determined

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Not determined

16. OTHER INFORMATION



NFPA

Issue Date:

05-Aug-2011

Revision Date:

07-July-2020

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