

**\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\***

MSDS Name: Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B Protein, His Tag (MALS verified)

**\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\***

MSDS Name: Vibrio cholerae serotype O1 (strain ATCC 39315 / El Tor Inaba N16961) Cholera enterotoxin subunit B Protein, His Tag (MALS verified)  
 Catalog Numbers: GHB-V52H3

Company Identification: ACROBIOSYSTEMS INC  
 For information, call: +1 800-810-0816

**\*\*\*\* SECTION 2 - HAZARDS IDENTIFICATION \*\*\*\***

**EMERGENCY OVERVIEW**

Eye: Potassium chloride can cause eye irritation, including redness, tearing, and possible abrasions.  
 Skin: Sodium Phosphate is a corrosive material and can cause burns.  
     Sensitization possible through skin contact and inhalation.  
 Ingestion: Material can be irritating to mucous membranes and respiratory tract.  
 Inhalation: Inhalation of high concentrations of dust may cause nasal or lung irritation.  
     Ingestion of large quantities can produce gastrointestinal irritation and vomiting.  
 Chronic: N/A

**\*\*\*\* SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\***

The product contains no substances which at their given concentration, are considered to be hazardous to health.  
 We recommend handling all chemicals with caution.

**\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\***

Eyes: Rinse opened eye for at least 15 minutes under running water, lifting upper and lower eyelids occasionally.  
     Seek medical attention.  
 Skin: Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes.  
     Seek medical attention.  
 Ingestion: swallowed and patient is conscious, induce vomiting. Seek medical attention immediately.  
 Inhalation: In case of unconsciousness, place patient on side position for transportation.  
     If not breathing, give artificial respiration. Supply fresh air or oxygen; seek medical attention immediately.

**\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\***

Fight larger fires with water or alcohol resistant foam. Firefighters should wear protective equipment and self-contained breathing apparatus. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

**\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\***

Personal Precautions                      Use personal protective equipment.  
 Methods for Cleaning Up                Take up mechanically and collect in suitable container for disposal.

**\*\*\*\* SECTION 7 - HANDLING AND STORAGE \*\*\*\***

Handling: Wear personal protective equipment.  
 Storage: Keep in properly labelled containers.

**\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\***

Engineering Controls: Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment  
 Respiratory Protection : In case of insufficient ventilation wear suitable respiratory equipment.  
 Hand Protection: Protective gloves.  
 Eye Protection: Safety glasses with side-shields.  
 Skin and Body Protection: Lightweight protective clothing.  
 Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.  
 Environmental Exposure: Prevent product from entering drains.

**\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\***

**General Information**

Form    Solid Lyophilized powder  
Important Health Safety and Environmental Information  
 Boiling Point/Range                        °C No data available                      °F No data available  
 Melting Point/Range                        °C No data available                      °F No data available  
 Flash Point                                    °C No data available                      °F No data available  
 Autoignition Temperature                °C No data available                      °F No data available  
 Oxidizing Properties                        No information available  
 Water Solubility                              No data available

**\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\***

Stability	Stable.
Materials to Avoid	No information available.
Hazardous decomposition products	No information available.
Polymerization	Hazardous polymerisation does not occur.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

**Acute Toxicity**

Principle Routes of Exposure/  
Potential Health effects

Eyes	May cause eye irritation with susceptible persons.
Skin.	No information available.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed.

**Specific effects (Long Term Effects)**

Carcinogenic e	No information available.
Mutagenic E	No information available.
Reproductive T	No information available.
Sensitization	No information available.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity E	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable.
Bioaccumulation	Does not bioaccumulate.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in accordance with local regulations

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

Transportation information-DOT/IATA/IMDG  
Not dangerous goods. Be available for any mode of transportation.

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

This safety datasheet complies with the requirements of Regulation (EC) No. 1272/2008 (CLP/EU-GHS), 29 CFR 1910.1200 (OSHA).  
Safety, health and environmental regulations/legislation specific for the substance or mixture---no data available  
Chemical Safety Assessment---For this product a chemical safety assessment was not carried out

\*\*\*\* SECTION 16 - OTHER INFORMATION\*\*\*\*

For research use only

**Reported by:**

Company Name : ACROBIOSYSTEMS INC

Date: 05/31/2024