# **** MATERIAL SAFETY DATA SHEET ****

MSDS Name: Vibrio cholerae serotype O1 CTXB Protein, His Tag

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

MSDS Name: Vibrio cholerae serotype O1 CTXB Protein, His Tag
Catalog Numbers: CTB-V52E8

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 effects | No information available. |
| Mutagenic Effects | No information available. |
| Reproductive Toxicity | No information available. |
| Sensitization | No information available. |

## **** SECTION 12 - ECOLOGICAL INFORMATION ****

| | |
|---|---|
| Ecotoxicity Effects | 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. 1907/2006.
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:** 09/09/2019