

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

MSDS Name: Biotinylated HCoV-229E Spike Trimer Protein (TI 871-872 PP), His,Avitag™ (MALS verified)

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

MSDS Name: Biotinylated HCoV-229E Spike Trimer Protein (TI 871-872 PP), His,Avitag™ (MALS verified)

Catalog Numbers: SPN-H82E8

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: 06/12/2024