



# Material Safety data sheet

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1-1. Product identifiers

Product name: BMTS-AUT-VEGF-A

Product number: UBP-AVA-1

Brand: UbiProtein, Corp.

### 1-2. Recommended use of the chemical and restrictions on use

Identified uses: For R&D, Laboratory chemicals, Cosmetic ingredients

It can not be used for pharmaceutical, household, and other purposes.

### 1-3. Details of the supplier of the safety data sheet

Company: UbiProtein Corp.

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Telephone: +82 70 7005 4365

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## SECTION 2: Harzards identification

### 2-1. GHS classification

Not a hazardous substance of mixture according to the Globally Harmonized System (GHS).

### 2-2. GHS-Labeling

Not a hazardous substance of mixture according to the Globally Harmonized System (GHS).

### 2-3. Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3-1. Substances

Synonyms: Biological Materials Transdermal System linked AUT-VEGF-A,

Recombinant human DNA expressed in *E. coli*

INCI name: Dodecapeptide-sh-Polypeptide-9

CAS-No.: None

No components need to be disclosed according to the applicable regulations.

## **SECTION 4: FIRST AID MEASURES**

### **4-1. Description of first aid measures**

#### **When you get into your eyes**

As a precaution, rinse both eyes with running water.

#### **Skin contact**

Rinse thoroughly with soap and water.

#### **When inhaled**

If swallowed, move person to a well-ventilated place. If not breathing, give artificial respiration.

#### **When ingested**

First, rinse your mouth with water. Never give anything to an unconscious person.

### **4-2. Most important acute symptoms and effects**

No data available

### **4-3. Most important delay symptoms and influences**

No data available

### **4-4. Other physician precautions**

No data available

## **SECTION 5: Firefighting measure**

### **5-1. Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5-2. Specific hazards arising from the chemical**

Combustible.

### **5-3. Protective equipment and precautions to be used when fighting fire**

Wear self-contained breathing apparatus if necessary.

## **SECTION 6: Accidental release measures**

### **6-1. Measures and protective equipment to protect the human body**

Avoid dust formation and avoid inhalation of vapor, mist or gas.

## 6-2. Measures to protect the environment

Do not allow product to enter drains.

## 6-3. Purification or removal methods

Keep container in a cool, dry place.

## SECTION 7: Handling and storage

### 7-1. Safety Handling tips

Install a suitable exhaust vent where dust is generated.

### 7-2. Safe storage

Store in a cool, well-ventilated place.

Recommended Storage Temperature -20 ~ 4 °C

## SECTION 8: Exposure protection and personal protection

### 8-1. Management factor

Contains no substances with exposure limit.

### 8-2. Appropriate engineering management

General industrial hygiene practice.

### 8-3. Personal protective equipment

#### Respiratory protection

No respiratory protection is necessary. Use a N95 (US) or P1 (EN 143) dust mask if you need to protect the lungs dust level as desired at any location. Use materials such as respirators as tested and certified substances such as NIOSH (US) or CEN (EU) as specified by the government.

#### Hand protection

Dealing with gloves. Gloves should be inspected before use. Use proper glove removal techniques (not touching the outer surface of the gloves) to avoid contact with skin when using this product, and dispose of contaminated gloves according to applicable laws and GLP (Good Laboratory Practice) Please dry. The selected protective gloves must comply with the requirements of EU Directive 89/686 / EEC and the EN 374 standard derived therefrom.

#### Eye protection

Use eye protection devices that have been tested and certified under reasonable governmental standards such as NIOSH (US) or EN166 (EU).

#### Body protection

Choose the type of protective equipment, the concentration and amount of hazardous substances, and the specific workplace conditions. The type of protective equipment must be selected according to the concentration and amount of dangerous substances in a specific workplace.

## Hygiene precautions

Observe general industry hygiene standards.

## SECTION 9: Physical and chemical properties

### 9-1. Physicochemical properties

- A. Appearance  
Form: liquid (stored in physiological saline)  
Color: Colorless
- B. Odor: Odorless
- C. Odor Threshold:
- D. pH: 8.0
- E. Melting point: No data available
- F. Initial boiling point: No data available
- G. Flash point: No data available
- H. Evaporation rate: No data available
- I. Flammability (solid, gas): No data available
- J. Print or explosion: No data available
- K. Vapor pressure: No data available
- L. Acceptability: No data available
- M. Vapor density: No data available
- N. Density: No data available
- O. n-octanol / water: No data available
- P. Auto-ignition temperature: No data available
- Q. Decomposition temperature: No data available
- R. Dynamic viscosity: No data available.
- S. Molecular Weight: Reducing condition - about 20 / non-reducing condition: about 40 (kDa)

### 9-2. Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10-1. Chemical stability and potential for adverse reactions

Stable under recommended storage conditions

### 10-2. Possibility of adverse reaction



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No data available

**10-3. Conditions to avoid**

No data available

**10-4. Mixed Prohibited Substances**

Strong acidity, strong base

**10-5. Hazardous substances generated during decomposition**

Hazardous decomposition products resulting from fire. The nature of the degradation product is unknown.

Other decomposition products No data available

**10-6. Thermal decomposition**

No data available

**SECTION 11: Toxicity information**

**11-1. Information on possible routes of exposure**

Inhalation - May be harmful if inhaled. May cause respiratory irritation.

Ingestion - May be harmful if swallowed.

Skin - May be absorbed through the skin, may cause skin irritation and may be harmful.

May cause eye-to-eye irritation.

**11-2. Delayed, acute, and chronic effects of short-term and long-term exposure**

**Acute toxicity:** No data available

**Skin corrosion / irritation:** No data available

**Serious eye damage / eye irritation:** No data available

**Respiratory / Skin Sensitization:** No data available

**Carcinogenicity :** No data available

**Germ cell mutagenicity:** No data available

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Aspiration hazard:** No data available

**11-3. Numerical measures of toxicity (eg, acute toxicity estimates)**

No data available

**11-4. Additional Information**

RTECS: No data available

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## **SECTION 12: Environmental impact**

### **12-1. Aquatic toxicity**

No data available

### **12-2. Elimination information (persistence and degradability) in the environment**

No data available

### **12-3. Bioaccumulative potential**

No data available

### **12-4. Soil Mobility**

No data available

### **12-5. Other adverse effects**

No data available

## **SECTION 13: Disposal precautions**

### **13-1. Disposal method**

Please provide residues and non-regenerated solutions to authorized waste disposal companies.

### **13-2. Contaminated packaging**

Discard the product as it is included.

## **SECTION 14: Information for transportation**

### **14-1. IMDG**

Not dangerous goods

### **14-2. IATA**

Not dangerous goods

### **14-3. Further information**

Not classified as dangerous in the meaning of transport regulations.

## **SECTION: 15 Regulatory information**

### **15-1. Regulations under the Industrial Safety and Health Act**

Harmful Substances to be Authorized - Not relevant

Prohibited to manufacture, etc. Hazardous Substances - Not relevant

Carcinogen - Not relevant

Work environment Measured object harmful factor - not relevant

Harmful factors subject to special medical examination - not relevant

Controlled Substance - Not relevant

**15-2. Regulations under the Chemical Substance Control Act**

Toxic substance - not relevant

Observation material - not relevant

Restricted Substances - Not relevant

Prohibited Substances - Not relevant

Material to avoid accidents - not relevant

**15-3. Regulations under the Dangerous Goods Safety Management Act**

Not relevant

**15-4. Regulations under the Waste Management Act**

Disposal must be in accordance with Article 13 of the Waste Disposal Act.

**SECTION 16: Other information**

**A. Date Created:** 2018.07.20

**B. Version:** 2.0 Revision Date 2024.04.18

**C. Further information**

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