

# SAFETY DATA SHEET

SDS DATE: June 24, 2021



## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** HDAC6 Blocking Peptide  
**PRODUCT CODES:** Cat# 3606BP-50  
**RESTRICTIONS ON USE:** For laboratory research purposes. Not for drug or household use.  
**MANUFACTURER:** BioVision, Inc.  
**ADDRESS:** 155 S. Milpitas Boulevard, Milpitas, CA 95035  
**EMERGENCY PHONE:** 858-373-8066  
**OTHER CALLS:** 408-493-1800  
**FAX PHONE:** 408-493-1801  
**EMAIL:** [sds@biovision.com](mailto:sds@biovision.com)

## SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Amount	Safety Information
HDAC6 Blocking Peptide	Contains EDTA, BSA and Glycerol	3606BP-50: 50 µg	See Below

### EDTA:

#### Emergency Overview

**GHS Classification:** Eye irritation (Category 2A), H319

Short-term (acute) aquatic hazard (Category 3), H402

**GHS Label elements, including precautionary statements**



#### Pictogram:

#### Signal word:

Warning

#### Hazard statement(s):

H319: Causes serious eye irritation.

H402 Harmful to aquatic life.

#### Precautionary statement(s):

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear eye protection/ face protection.

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

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container to an approved waste disposal plant.

#### HMIS Classification

Health hazard: 1

Chronic Health Hazard: \*

Flammability: 0

Physical hazards: 0

#### NFPA Rating

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** Toxic if swallowed.

### Bovine Serum Albumin (BSA):

#### Emergency Overview

**GHS Classification:** Acute Toxicity; Oral, Category 4

**GHS Label elements, including precautionary statements**



#### Pictogram:

#### Signal word:

Warning

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**Hazard statement(s):** H302: Harmful if swallowed.  
**Precautionary statement(s):** P264: Wash {hands} thoroughly after handling.  
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P330: Rinse mouth.  
**Adverse Human Health:** Harmful if swallowed.  
**Effects and Symptoms:** Material may be irritating to the mucous membranes and upper respiratory tract.  
May be harmful by inhalation or skin absorption.  
May cause eye, skin, or respiratory system irritation.  
To the best of our knowledge, the toxicological properties have not been thoroughly investigated

## HMIS Classification

Health hazard: 1  
Flammability: 0  
Physical hazards: 0

## NFPA Rating

Health Hazard: 1  
Fire: 0  
Reactivity Hazard: 0

## Potential Health Effects

**Inhalation:** May be harmful by inhalation. Material may be irritating to the mucous membranes and upper respiratory tract.  
**Skin:** Harmful if absorbed through skin. May cause skin irritation.  
**Eyes:** Cause eye irritation.  
**Ingestion:** Harmful if swallowed

## Glycerol:

### Emergency Overview

**OSHA Hazards:** Target Organ Effect

**Target Organs:** Kidney

**GHS Classification:** Skin irritation (Category 3)

Eye irritation (Category 2B)

### GHS Label elements, including precautionary statements

**Pictogram:** none

**Signal word:** none

**Hazard statement(s):** none

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

## HMIS Classification

Health hazard: 1  
Chronic Health Hazard: \*  
Flammability: 1  
Physical hazards: 0

## NFPA Rating

Health hazard: 1  
Fire: 1  
Reactivity Hazard: 0

## Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin:** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes:** May cause eye irritation.  
**Ingestion:** May be harmful if swallowed.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula	Concentration
EDTA	60-00-4	205-358-3	372.24	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> · 2H <sub>2</sub> O	≤0.1%
BSA	9048-46-8	232-936-2	--	--	0.5%
Glycerol	56-81-5	200-289-5	92.09	HOCH <sub>2</sub> CH(OH)CH <sub>2</sub> OH	≤30%

## SECTION 4: FIRST AID MEASURES

**General advice** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### EDTA:

#### Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

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**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information** No data available

## **Bovine Serum Albumin (BSA):**

**Suitable extinguishing media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.

**Unsuitable extinguishing media:** A solid water stream may be inefficient.

**Special protective equipment for fire fighters:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

**Further information:** No data available

## **Glycerol:**

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture** Carbon oxides

**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information** No data available

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**Personal precautions:** Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

**Environmental precautions:** Do not let product enter drains.

**Methods for cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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## **SECTION 7: HANDLING AND STORAGE**

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**Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: -20 °C. Air sensitive. Store under inert gas.

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## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **EDTA:**

**Control parameters**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Bovine Serum Albumin (BSA):**

**Exposure Controls:**

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
9048-46-8	Bovine Serum Albumin (BSA)	No data	No data	No data
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other limits
9048-46-8	Bovine Serum Albumin (BSA)	No data	No data	No data

### **Glycerol:**

**Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

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Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

No special environmental precautions required.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	BSA	EDTA	Glycerol
Appearance:	A dry powder	White Powder	Clear liquid
pH:	No data available	2.5 at 10 g/l at 23 °C	5.5-8
Water Solubility:	No data available	0.4 g/l at 20 °C	Soluble
Other Solubility:	No data available	No data available	No data available
Boiling Point (°C):	No data available	No data available	182 °C (360 °F)
Melting Point (°C):	No data available	250 °C	20 °C (68 °F)
Flash Point (°C):	No data available	No data available	160 °C (320 °F)
Ignition Temperature (°C):	No data available	No data available	370 °C (698 °F)
Density	No data available	No data available	1.25 g/ml

## SECTION 10: STABILITY AND REACTIVITY

Property	BSA	EDTA	Glycerol
Chemical stability	Stable under recommended storage conditions		
Conditions to avoid:	No data available	No data available	No data available
Materials to avoid:	No data available	Strong oxidizing agents	Strong bases, strong oxidizing agents
Hazardous decomposition products:	No data available	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> )	Carbon oxides

## SECTION 11: TOXICOLOGICAL INFORMATION

### EDTA:

**Acute toxicity** LD50 Oral - Rat - male and female - 4,500 mg/kg (OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation** Skin – Rabbit Result: No skin irritation - 20 h Remarks: (ECHA)

**Serious eye damage/eye irritation** Eyes – Rabbit Result: Eye irritation Remarks: (ECHA)

**Respiratory or skin sensitization** Maximisation Test - Guinea pig Result: negative (OECD Test Guideline 406) Remarks: (in analogy to similar products) Maximisation Test – Rabbit Result: Does not cause skin sensitisation.

**Germ cell mutagenicity** No data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity** No data available

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

**Specific target organ toxicity - repeated exposure** No data available

**Aspiration hazard** No data available

**Additional Information** RTECS: AH4025000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Bovine Serum Albumin (BSA):

The toxicological effects of this product have not been thoroughly studied

### Glycerol:

**Acute toxicity:** LD50 Dermal – rabbit – >10,000 mg/kg

**Irritation and corrosion:** no data available

**Sensitization:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:**

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- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

## Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

**Synergistic effects:** no data available

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional information:** RTECS: MA8050000

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## SECTION 12: ECOLOGICAL INFORMATION

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### EDTA:

**Toxicity** Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 41 mg/l - 96 h Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 625 mg/l - 24 h (DIN 38412)

**Persistence and degradability** Biodegradability aerobic - Exposure time 20 d Result: 0 - 20 % - Not readily biodegradable. Remarks: (ECHA)

Ratio BOD/ThBOD < 1 % Remarks: (IUCLID)

### **Bioaccumulative potential**

Bioaccumulation Lepomis macrochirus - 28 d at 21 °C - 80 µg/l(Edetic acid) Bioconcentration factor (BCF): 1.8

**Mobility in soil** No data available

**Results of PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. May be harmful to aquatic organisms due to the shift of the pH. Avoid release to the environment.

### Bovine Serum Albumin (BSA):

**Toxicity:** Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

**Persistence and degradability:** No data available

**Toxicity:** No data available

**Bio accumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

### Glycerol:

**Persistence and degradability:** no data available

**Toxicity:** no data available

**Bioaccumulative potential:** no data available

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** no data available

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:** Dispose of as unused product.

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## SECTION 14: TRANSPORT INFORMATION

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### EDTA:

**DOT (US)** UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Edetic acid)

Reportable Quantity (RQ): 5000 lbs Poison Inhalation Hazard: No

**IMDG** Not dangerous goods

**IATA** Not dangerous goods

### Bovine Serum Albumin (BSA):

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

### Glycerol:

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

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## SECTION 15: REGULATORY INFORMATION

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**SARA 302 Components:** SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** EDTA: Acute Health Hazard; Glycerol: Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components:** Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

**Pennsylvania Right To Know Components:** Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

**New Jersey Right To Know Components:** Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**EU regulations:** This product is not classified according to the EU regulations.

Component	Risk Phrases	Safety Phrases
BSA	R22	S36/37/39
EDTA	--	S36/37/39
Glycerol	--	S24/25; S36/37/39

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## SECTION 16: OTHER INFORMATION

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**DISCLAIMER:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.