

SAFETY DATA SHEET

SDS DATE: May 29, 2020

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IL-2 (Rat) ELISA Kit
PRODUCT CODES: Cat# E4831-100
RESTRICTIONS ON USE: For laboratory research purposes. Not for drug or household use.
MANUFACTURER: BioVision, Inc.
DIVISION:
ADDRESS: 155 S. Milpitas Blvd. Milpitas, CA 95035
EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE:
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Description	Volume	Safety Information
Micro ELISA Plate	Plate	8 X 12 strips	No hazards
Reference Standard	--	2 vials	No hazards
Biotinylated Detection Ab (100x)	Liquid (Contains Proclin 300)	120 µl	No hazards
HRP Conjugate (100x)	Liquid (Contains Proclin 300)	120 µl	No hazards
Reference Standard & Sample Diluent	Solid (Contains Proclin 300)	20 ml	No hazards
Biotinylated Detection Antibody Diluent	Liquid	14 ml	No hazards
HRP Conjugate Diluent	Liquid (Contains Proclin 300)	14 ml	No hazards
Wash Buffer (25X)	Liquid	30 ml	No hazards
Substrate Reagent	Liquid (Contains Carbamide peroxide)	10 ml	See Below
Stop Solution	Liquid (Contains Sulfuric acid)	10 ml	See Below
Plate Sealer	--	4	No hazards

SECTION 3: HAZARDS IDENTIFICATION

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula	Concentration
Sulfuric acid	7664-93-9	231-639-5	98.08	H ₂ SO ₄	<10%
Carbamide peroxide	124-43-6	204-701-4	--	CH ₄ N ₂ O · H ₂ O ₂	0.05%
Proclin 300	--	--	--	--	<0.1%

Sulfuric acid:

Emergency Overview

OSHA Hazards: Target organ effect, Corrosive

Target Organs: Teeth, Lungs

GHS Classification:

Corrosive to metals
Skin corrosion (Category 1A)
Serious eye damage (Category 1)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Hazard statement(s):

Danger
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

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H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Precautionary statement(s): P234 Keep only in original container.

P264 Wash skin thoroughly after handling.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

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

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

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

P362 Take off contaminated clothing and wash before reuse.

P390 Absorb spillage to prevent material damage.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

HMIS Classification

Health hazard: 3

Chronic health hazard: *

Flammability: 0

Physical hazards: 2

NFPA Rating

Health hazard: 3

Fire: 0

Reactivity hazard: 0

Special hazard: W

Potential Health Effects

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eyes: Causes eye burns.

Ingestion: May be harmful if swallowed

Carbamide peroxide:

Emergency Overview

OSHA Hazards: Target organ effect, Corrosive

Target Organs: Teeth, Lungs

GHS Classification:

GHS Label elements, including precautionary statements

Pictogram:



Danger

Signal word:

Hazard statement(s):

H272: May intensify fire; oxidizer.

H314: Causes severe skin burns and eye damage.

Precautionary statement(s):

P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 + P330: IF SWALLOWED, call a POISON CENTER/doctor; if you feel unwell, Rinse mouth.

P303 + P361 + P353: IF ON SKIN (or hair), take off immediately all contaminated clothing,

Rinse skin with water/shower.

P304 + P340 + P310: IF INHALED, remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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: 3

Chronic health hazard: *

Flammability: 0

Physical hazards: 2

NFPA Rating

Health hazard: 3

Fire: 0

Reactivity hazard: 0

Special hazard: W

Potential Health Effects

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eyes: Causes eye burns.

Ingestion: May be harmful if swallowed

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SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

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

In case of skin contact: Take off contaminated clothing and shoes immediately. 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: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: Suitable: Water spray, alcohol-resistant foam, dry chemical, carbon dioxide or appropriate foam. For small fires, use media such as "alcohol" foam, dry chemical or carbon dioxide. For large fires, apply water from as far as possible. Use large quantities of water applied as a mist or spray. Solid streams of water may be ineffective. Cool affected containers with flooding quantities of water.

Special precautions for fire-fighters: Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Special hazards arising from the substance or mixture: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material (eg. sand, diatomaceous earth, vermiculite). Place in a container for disposal according to local regulations. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

- Wear appropriate protective clothing and safety gloves.
- Avoid inhalation.
- Avoid contact with eyes, skin and clothing.
- Mechanical exhaust required.
- Keep away from ignition sources, heat and flame.
- No smoking at working site.
- Incompatibilities: Strong oxidizing agents, Strong acids. Handling and unloading should be light, to prevent packaging broken, damp and cause losses.
- Working place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

Conditions for safe storage

- Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- Keep away from heat, sparks and flame.
- Keep away from sources of ignition.
- Incompatible: Strong oxidizing agents, Strong acids.
- Storage place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

Recommended storage temperature: 4°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Government approved respirator if needed.

Hand protection

Protective 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.

Eye protection

Chemical safety goggles if needed..

Skin and body protection

Wear suitable protective clothing according to the concentration and amount of the substance at the workplace.

Other Protect

No smoking, drinking and eating at working site. Wash thoroughly after handling.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Sulfuric acid	Carbamide peroxide
Appearance:	Colorless transparent liquid	White crystalline
pH:	~1	No data available
Water Solubility:	No data available	No data available
Other Solubility:	No data available	No data available
Boiling Point (°C):	No data available	No data available
Melting Point (°C):	No data available	90 - 93 °C - lit.
Flash Point (°C):	No data available	No data available
Ignition Temperature (°C):	No data available	No data available
Density:	No data available	1.390 g/cm ³ at 20 °C

SECTION 10: STABILITY AND REACTIVITY

Property	Sulfuric acid	Carbamide peroxide
Chemical stability:	Stable under recommended storage conditions.	
Conditions to avoid:	Heat, flames and sparks	
Materials to avoid:	Strong oxidizing agent, Light sensitive, Alcohols, Organic materials, Heavy metals, Powdered metals, Strong reducing agents, Amines, Mercaptans.	
Hazardous decomposition products:	Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.	

SECTION 11: TOXICOLOGICAL INFORMATION

Sulfuric acid:

Acute toxicity:

LD50 Oral - Rat - 1530 mg/kg

LD50 Dermal - Rabbit - 2730 mg/kg

LC50 Inhalation- Rat - 850 mg/m³ 1 h

Skin corrosion/irritation: Can cause severe burns

Serious eye damage/eye irritation: Can cause severe burns

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

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

Teratogenicity: no data available

Aspiration hazard: Can cause severe burns

Potential Health Effects

Inhalation: no data available

Skin: May be harmful if absorbed through skin. Causes burns.

Eyes: Causes eye burns.

Ingestion: May be harmful if swallowed. Causes burns

Signs and Symptoms of Exposure: no data available

Synergistic effects: no data available

Additional information: no data available

Carbamide peroxide:

Acute toxicity: LD50 = 4060 mg/kg (skin-rat)

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

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

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Reproductive toxicity: no data available

Teratogenicity: no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: no data available

Skin: no data available

Eyes: no data available

Ingestion: no data available

Signs and Symptoms of Exposure: no data available

Synergistic effects: no data available

Additional information: no data available

SECTION 12: ECOLOGICAL INFORMATION

Sulfuric acid & Carbamide peroxide:

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

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of waste in accordance to applicable national, regional, or local regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose in the same manner as unused product.

SECTION 14: TRANSPORT INFORMATION

Sulfuric acid:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

Sulfuric acid

SARA 302 Components: The following components are subject to reporting levels established by SARA Title III, Section 302: Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-07-01


SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313: Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-07-01

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-07-01

Pennsylvania Right To Know Components: Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-07-01

New Jersey Right To Know Components: Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-07-01

California Prop. 65 Components:  WARNING: This product can expose you to chemicals including Sulfuric acid & TMB, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

EU regulations

Component	Risk Phrases	Safety Phrases
Sulfuric acid	R35	S26, S30, S45
Carbamide peroxide	--	--

SECTION 16: OTHER INFORMATION:

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.