SAFETY DATA SHEET

Cat# K4908-100_Nampt (mouse_rat) Serum Elisa Kit **SDS DATE: May 21, 2015**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Nampt (Visfatin/PBEF) (mouse/rat) Serum ELISA Kit**

PRODUCT CODES: **Cat# K4908-100**

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: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
Pre-coated Microtiter Plate	Plate	1 ea (12 x 8 well strips)	No hazards
Wash Buffer (10X)	Liquid	50 ml	No hazards
Diluent (5X)	Liquid	50 ml	No hazards
Detection Antibody	Liquid	12 ml	No hazards
Detector 100X (Hrp conjugated anti-IgG)	Liquid	150 µl	No hazards
Mouse Nampt Standard (lyophilized,64 ng)	Lyophilized	1 vial	No hazards
Mouse Nampt QC Sample (lyophilized)	Lyophilized	1 vial	No hazards
TMB Substrate Solution	Liquid	12 ml	No hazards
Stop Solution	Liquid (contains sulfuric acid >1%)	12 ml	See below
Plate Sealers	--	3 each	No hazards

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: Danger
Hazard statement(s):
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Sulfuric acid	7664-93-9	231-639-5	98.08	H_2O_4S

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: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
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

Condition of flammability: Not flammable or combustible.
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environemtn must be avoided.
Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Avoid inhalation of vapor or mist.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: 4°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Sulfuric acid:

Components	CAS-No.	Value	Control parameters	Basis
Sulfuric acid	7664-93-9	TWA	0.2 mg/m^3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	1 mg/m^3	USA. OSHA – Table Z-1 Limits for Air Contaminants – 1910.1000
		TWA	1 mg/m^3	USA. Occupational Exposure Limits (OSHA) –

				Table Z-1: Limits for Air Contaminants

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection

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

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Sulfuric acid
Appearance:	Liquid
pH:	1.2 at 5 g/l
Water Solubility:	Soluble
Other Solubility:	290 ^{o}C (554 ^{o}F)
Boiling Point (°C):	3 ^{o}C (37 ^{o}F)
Melting Point (°C):	No data available
Flash Point (°C):	No data available
Ignition Temperature (°C):	1.84 g/cm^3
Density:	**Sulfuric acid**

SECTION 10: STABILITY AND REACTIVITY

Property	Sulfuric acid
Chemical stability:	Stable under recommended storage conditions
Conditions to avoid:	No data available
Materials to avoid:	Bases, halides, organic materials, carbides, fulminates, nitrates, picrates, cyanides, chlorates, alkali halides, zinc salts, permanganates, hydrogen peroxide, azides, perchlorates, nitromethane, phosphorus. Reacts violents with: cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorus (III) oxides, powdered metals
Hazardous decomposition products:	Sodium oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Sulfuric acid:

Acute toxicity: LD50 Oral – rat – 2,140 mg/kg
LC50 Inhalation – rat – 2 h – 510 mg/m^3
Skin corrosion/irritation: Skin – rabbit – extremely corrosive and destructive to tissue
Serious eye damage/eye irritation: Eyes – rabbit – severe eye irritation
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data available
Carcinogenicity: The International Agency for Research on Cancer (IARC) has determined that occupational exposure to strong-inorganic-acid mists containing sulfuric acid is carcinogenic to rats (Group 1).

- IARC: No component of this product present at levels greather 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: no data available
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. Causes severe eye burns.
Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, pulmonary edema. Effects may be delayed. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic effects: no data available
Additional information: RTECS: WS5600000

SECTION 12: ECOLOGICAL INFORMATION

Sulfuric acid:
Persistence and degradability: no data available
Toxicity: Toxicity to fish: LC50 – Gambusia affinis (Mosquito fish) – 42 mg/l – 96 h
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scruber but exert extra care in igniting as some components in this kit are highly flammable.
Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Sulfuric acid:
DOT (US): UN-number: 1830, Class: 8, Packing group: II; Proper shipping name: Sulfuric acid; Reportable Quantity (RQ): 1000 lbs.; Marine pollutant: No; Poison inhalation hazard: No
IMDG: UN-number: 1830, Class: 8, Packing group: II; EMS-No: F-A, S-B; Proper shipping name: SULFURIC ACID; Marine pollutant: No
IATA: UN-number: 1830, Class: 8, Packing group: II; Proper shipping name: Sulfuric acid

SECTION 15: REGULATORY INFORMATION

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:
Sulfuric acid: 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 contains a chemical known to the State of California to cause cancer:
Sulfuric acid, CAS-No. 7664-93-9; Revision Date: 2007-09-28

EU regulations

Component	Risk Phrases	Safety Phrases
Sulfuric acid	R35	S26, S30, S45

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.