

SAFETY DATA SHEET

SDS DATE: March 22, 2021



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Total Bile Acids (TBA) Assay Kit (Colorimetric)

PRODUCT CODES: Cat# K209-100

RESTRICTIONS ON USE: For laboratory research purposes. Not for drug or household use.

MANUFACTURER: BioVision, Inc.

ADDRESS: 155 South Milpitas Blvd., Milpitas, CA 95035

EMERGENCY PHONE: 858-373-8066

OTHER CALLS: 408-493-1800

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SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Description	Volume	Safety Information
TBA Cycling Assay Buffer	Proprietary Buffer	7.0 ml	No hazards
TBA Probe Buffer	Proprietary Buffer	14 ml	No hazards
TBA Probe	Lyophilized (contains Thio-NAD)	1 vial	See below
TBA Cycling Enzyme Mix	Lyophilized	1 vial	No hazards
NADH	Lyophilized	1 vial	No hazards
TBA Standard (100 mM)	Lyophilized	1 vial	No hazards

NOTE: The safety data shown below is based on pure ingredients: The amounts in this kit are far less.

Thio-NAD:

Emergency Overview

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Specific target organ toxicity - single exposure (Category 1), H370

GHS Label elements, including precautionary statements



Pictogram:

Signal word:

Danger

Hazard statement(s):

H370 Causes damage to organs.

Precautionary statement(s):

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 3

Flammability: 0

Physical hazards: 1

NFPA Rating

Health Hazard: 3

Fire: 0

Reactivity Hazard: 0

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 severe eye burns.

Ingestion: Danger if swallowed.

SECTION 3: HAZARDS IDENTIFICATION

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula	Concentration
Thio-NAD	4090-29-3	--	679.49	C ₂₁ H ₂₇ N ₇ O ₁₃ P ₂ S	≤100%

SECTION 4: FIRST AID MEASURES

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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: 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.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Oxides of phosphorus

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, 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 environment 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. Keep away from sources of ignition - no smoking.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature -20 °C Storage class (TRGS 510): 13: Non Combustible Solids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Thio-NAD

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

Tightly fitting safety goggles. Face shield (8-inch minimum). 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	Thio-NAD
Appearance:	Solid
pH	No data available
Water Solubility:	No data available
Other Solubility:	No data available
Boiling Point (°C):	No data available
Melting Point (°C):	No data available
Flash Point (°C):	No data available
Ignition Temp. (°C):	No data available
Density:	No data available

SECTION 10: STABILITY AND REACTIVITY

Property	Thio-NAD
Chemical Stability:	Stable under recommended storage conditions

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Conditions to Avoid:	No data available
Materials to Avoid:	Strong oxidizing agents
Hazardous decomposition products:	Under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Oxides of phosphorus

SECTION 11: TOXICOLOGICAL INFORMATION

Thio-NAD:

Acute toxicity: no data available

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:

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 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 carcinogen or potential 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

Specific target organ toxicity – single exposure (GHS): no data available

Specific target organ toxicity – repeated exposure (GHS): 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 severe eye burns.

Ingestion: Danger if swallowed.

Signs and Symptoms of Exposure: no data available

Synergistic Effects: no data available

Additional information: RTECS: not available

SECTION 12: ECOLOGICAL INFORMATION

Thio-NAD:

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: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Thio-NAD:

DOT (US): Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

SECTION 15: REGULATORY INFORMATION

SARA 302 Components: SARA 302: No chemical 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: Thio-NAD: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right To Know Components: No components are subject to the Pennsylvania Right to Know Act

New Jersey Right To Know Components: No components are subject to the New Jersey Right to Know Act

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

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EU regulations



Component	Risk Phrases	Safety Phrases
Thio-NAD	--	--

SECTION 16: OTHER INFORMATION:

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PREPARATION 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.