SAFETY DATA SHEET

Cat# K391-100 Sodium Assay Kit (Colorimetric)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sodium Assay Kit (Colorimetric)

PRODUCT CODES: Cat# K391-100 **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 |
|---------------------|-------------|---------|--------------------|
| Na Assay Buffer | Liquid | 25 ml | No hazards |
| Substrate | Liquid | 5 ml | No hazards |
| βG | Liquid | 15 µl | No hazards |
| DTT (1 M) | DTT | 0.25 ml | See below |
| Na Developer | Liquid | 10 ml | No hazards |
| Na Standard (1.5 M) | Liquid | 1 ml | No hazards |

SDS DATE: Jun 4, 2015

DTT:

Emergency Overview

GHS Classification: Acute toxicity, Oral (Category 4)

Skin irritation (Category 2) Eye irritation (Category 2A)

GHS Label elements, including precautionary statements

Pictogram:

Signal word: Warning

Hazard statement(s): H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation H335 May cause respiratory irritation.

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: 2

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: Harmful if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS Number | EC-No. | Molecular Weight | Chemical Formula | Percentage |
|-----------|------------|-----------|------------------|-------------------|------------|
| DTT | 3483-12-3 | 222-468-7 | 154.25 | $C_4H_{10}O_2S_2$ | 14.9 |

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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: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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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: Hazardous combustion products formed under fire conditions— no data available.

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 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 exhause ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

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 | DTT | |
|--------------------------------------|-------------------------|--|
| Appearance: | Clear liquid | |
| pH: | 3.0-5.0 | |
| Water Solubility: | Highly soluble | |
| 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: | 1.035 g/cm ³ | |

SECTION 10: STABILITY AND REACTIVITY

| Property | DTT | |
|------------------------------------|---|--|
| Chemical Stability: | Stable under recommended storage conditions | |
| Conditions to Avoid: | No data available | |
| Materials to Avoid: | Bases, oxidizing agents, reducing agents, alkali metals | |
| Hazardous decomposition: products: | Carbon oxides, sulfur oxides, hydrogen sulfide gas | |

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SECTION 11: TOXICOLOGICAL INFORMATION

DTT:

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 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

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: Harmful if swallowed.

Signs and Symptoms of Exposure: Exposure may cause central nervous system depression. 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: not available

SECTION 12: ECOLOGICAL INFORMATION

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

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

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

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 II, Section 313.

SARA 311/312 Hazards:

DTT: Acute Health Hazard, Chronic Health Hazard

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

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Pennsylvania Right To Know Components:

DTT, CAS-No. 3483-12-3

New Jersey Right To Know Components:

DTT, CAS-No. 3483-12-3

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 |
|-----------|----------------|----------------|
| DTT | R22, R36/37/38 | S26, S36 |

SECTION 16: OTHER INFORMATION:

OTHER INFORMATION: 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.