

# SAFETY DATA SHEET

Cat# 1609-1000, Sodium butyrate

SDS DATE: Feb 28, 2012

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Sodium butyrate  
**PRODUCT CODES:** Cat# 1609-1000  
**MANUFACTURER:** BioVision, Inc.  
**ADDRESS:** 155 S. Milpitas Boulevard, 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 |
|-----------------|-------------|--------|--------------------|
| Sodium butyrate | Solid       | 1 mg   | See below          |

## SECTION 3: HAZARDS IDENTIFICATION

| Product Name/Chemical Name | CAS Number | EC-No.    | MW    | Chemical Formula                                  |
|----------------------------|------------|-----------|-------|---|
| Sodium butyrate            | 156-54-7   | 205-857-6 | 110.1 | C <sub>4</sub> H <sub>7</sub> O <sub>2</sub> · Na |

### Sodium butyrate:

#### Emergency Overview

**OSHA Hazards:** Target organ effect, Irritant, Mutagen

**Target Organs:** Blood

**GHS Classification:** Skin irritation (Category 1)  
Eye irritation (Category 2A)  
Germ cell mutagenicity (Category 2)  
Specific target organ toxicity – single exposure (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram:



**Signal word:** Warning

**Hazard statement(s):** H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H341 Suspected of causing genetic defects.

**Precautionary statement(s):** P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P281 Use personal protective equipment as required.  
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:** May be harmful if swallowed.

## 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.

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

## 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— carbon oxides, sodium oxides.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protection equipment. Avoid dust formation. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**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.

### Conditions for safe storage

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

Recommended storage temperature: room temperature (~23°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 particle respirator type N100 (US) or type P3 (EN 143) 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

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 and 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.

#### Hygiene measures

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

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| Property                   | Sodium butyrate         |
|----------------------------|-------------------------|
| Appearance:                | White solid             |
| pH:                        | No data available       |
| Water Solubility:          | 100 mM                  |
| Specific Gravity (g/ml):   | No data available       |
| Boiling Point (°C):        | No data available       |
| Melting Point (°C):        | 250-253 °C (482-487 °F) |
| Flash Point (°C):          | No data available       |
| Ignition Temperature (°C): | No data available       |
| Density                    | No data available       |

## SECTION 10: STABILITY AND REACTIVITY

| Property                          | Sodium butyrate                             |
|-----------------------------------|---|
| Chemical stability                | Stable under recommended storage conditions |
| Conditions to avoid:              | Moisture                                    |
| Materials to avoid:               | Strong oxidizing agents                     |
| Hazardous decomposition products: | Carbon oxides, sodium oxides                |

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Sodium butyrate:

**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:** In vitro tests showed mutagenic effects

### **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

**Specific target organ toxicity – single exposure (GHS):** Inhalation – may cause respiratory irritation.

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

**Aspiration hazard:** 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:** May be harmful if swallowed.

**Signs and Symptoms of Exposure:** Exposure may cause a burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, spasm, inflammation and edema of the larynx, inflammation and edema of the bronchi, pneumonitis, and pulmonary edema.

**Synergistic effects:** no data available

**Additional information:** RTECS: ET6400000

## SECTION 12: ECOLOGICAL INFORMATION

### Sodium butyrate:

**Persistence and degradability:** no data available

**Toxicity:** Toxicity to fish: LC50 – Lepomis macrochirus – 5,000 mg/l – 24 h

Toxicity to daphnia and other aquatic invertebrates: EC50 – Daphnia magna (Water flea) – 1,950 mg/l – 24 h

**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:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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

## SECTION 14: TRANSPORT INFORMATION

### Sodium butyrate:

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

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

## SECTION 15: REGULATORY INFORMATION

### Sodium butyrate:

**OSHA Hazards:** Target organ effect, Irritant, Mutagen

**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:** 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:** Sodium butyrate, CAS-No. 156-54-7

**New Jersey Right To Know Components:** Sodium butyrate, CAS-No. 156-54-7

**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                      |
|-----------------|------------------|-------------------------------------|
| Sodium butyrate | R22, R36/38, R68 | S26, S27/28, S29/35, S36/37/39, S45 |

## 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.