## MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: 1,2,4-Butanetriol

Sarchem Laboratories, Inc. 5012 Industrial Road Farmingdale, NJ 07727 Emergency Phone No: 800-255-3924 International: +1-813-248-0585 ChemTel Inc

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| <b>Component</b>  |  |
|-------------------|--|
| 1,2,4-Butanetriol |  |

<u>CAS</u> <u>EC No:</u> 3068-00-6 221-323-5 Molecular Formula; C4H10O3

Molecular Weight 106.12 g/mol

## 3. HAZARDS INFORMATION:

#### **Emergency Overview**

**OSHA Hazards** Irritant

## **HMIS Classification**

Health hazard: 2 Flammability: 1 Physical hazards: 0

## **NFPA Rating**

Health hazard: 2 Fire: 1 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.                                     |

## 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

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

## 5. FIRE FIGHTING MEASURES

#### **Flammable properties**

| Flash point          | 188 °C (370 °F) - closed cup |
|----------------------|------------------------------|
| Ignition temperature | no data available            |

## 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 fire fighting if necessary.

## 6. Accidental Release Measures

## **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing 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 and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## 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. Normal measures for preventive fire protection.

## **Conditions for safe storage**

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

## 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 N99 (US) or type P2 (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.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

#### Appearance

| Form   | clear, viscous liquid |
|--------|-----------------------|
| Colour | dark yellow           |

## Safety data

| pH                    | no data available                                      |
|-----------------------|--|
| Melting point         | no data available                                      |
| Boiling point         | 190 - 191 °C (374 - 376 °F) at 24 hPa (18 mmHg) - lit. |
| Flash point           | 188 °C (370 °F) - closed cup                           |
| Ignition temperature  | no data available                                      |
| Lower explosion limit | no data available                                      |
| Upper explosion limit | no data available                                      |
| Density               | 1.19 g/mL at 25 °C (77 °F)                             |
| Water solubility      | no data available                                      |

## **10. Stability and Reactivity**

**Storage stability** Stable under recommended storage conditions.

# **Conditions to avoid** Avoid moisture.

Avoid moisture.

Materials to avoid Strong oxidizing agents, Acid chlorides, Acid anhydrides

## Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides

## **11. Toxicological Information**

Acute toxicity LD50 Oral - mouse - 23,000 mg/kg

**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

**Specific target organ toxicity - single exposure (Globally Harmonized System)** no data available

### **Additional Information**

RTECS: EK7176000

#### 12. Ecological Information

**Elimination information (persistence and degradability)** No data available

## Ecotoxicity effects

No data available

## Further information on ecology

No data available

## 13. Disposal Considerations

## Product

Observe all federal, state, and local environmental regulations. 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

## 14. Transportation Information

**DOT (US)** Not dangerous goods

**IMDG** Not dangerous goods

**IATA** Not dangerous goods

## 15. Regulatory Information

**OSHA Hazards** Irritant

### **DSL Status**

This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list. (±)-1,2,4-Butanetriol CAS-No. 3068-00-6

### SARA 302 Components

SARA 302: No chemicals 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

Acute Health Hazard

#### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

(±)-1,2,4-Butanetriol CAS-No. 3068-00-6

### New Jersey Right To Know Components

(±)-1,2,4-Butanetriol CAS-No. 3068-00-6

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any othe reproductive harm.

## 16. OTHER INFORMATION:

#### **Further Information**

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