# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.1 Revision Date 08/22/2008 Print Date 07/28/2010

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 2-Bromo-2-methylpropane

Product Number : 135615 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C4H9Br Molecular Weight : 137.02 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2-Bromo-2-methy	/lpropane		
507-19-7	208-065-9	-	-

# 3. HAZARDS IDENTIFICATION

# **Emergency Overview**

**OSHA Hazards** Flammable Liquid

**HMIS Classification** 

Health Hazard: 0 Flammability: 3 Physical hazards: 0

**NFPA Rating** 

Health Hazard: 0 Fire: 3 Reactivity Hazard: 0

# **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause 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

Flush eyes with water as a precaution.

### If swallowed

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

### 5. FIRE-FIGHTING MEASURES

# Flammable properties

Flash point 16 °C (61 °F) - closed cup

Ignition temperature no data available

# Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

# Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### **Further information**

Use water spray to cool unopened containers.

### **6. ACCIDENTAL RELEASE MEASURES**

### Personal precautions

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

## **Environmental precautions**

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

# Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

# 7. HANDLING AND STORAGE

## Handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

# 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 multipurpose 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

For prolonged or repeated contact use protective gloves.

# **Eye protection**

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

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

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# **Appearance**

Form liquid

Colour dark brown

# Safety data

pH no data available

Melting point 20 °C (68 °F)

Boiling point 71 - 73 °C (160 - 163 °F)

Flash point 16 °C (61 °F) - closed cup

Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Density 1.22 g/mL at 20 °C (68 °F)

Water solubility no data available

# 10. STABILITY AND REACTIVITY

# Storage stability

Stable under recommended storage conditions.

# Conditions to avoid

Heat, flames and sparks.

# Materials to avoid

Strong bases

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen bromide gas

### Hazardous reactions

Vapours may form explosive mixture with air.

# 11. TOXICOLOGICAL INFORMATION

# **Acute toxicity**

LD50 Intraperitoneal - rat - 1,250 mg/kg

LD50 Intraperitoneal - mouse - 4,400 mg/kg

# Irritation and corrosion

no data available

### Sensitisation

no data available

# Chronic exposure

Carcinogenicity - mouse - Intraperitoneal

Tumorigenic: Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

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.

# Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Potential Health Effects**

InhalationSkinMay be harmful if inhaled. May cause respiratory tract irritation.May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

Additional Information RTECS: TX4150000

# 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**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

# Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2342 Class: 3 Packing group: II

Proper shipping name: Bromomethylpropanes

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 2342 Class: 3 Packing group: II EMS-No: F-E, S-D

Proper shipping name: BROMOMETHYLPROPANES

Marine pollutant: No

**IATA** 

UN-Number: 2342 Class: 3 Packing group: II

Proper shipping name: Bromomethylpropanes

### 15. REGULATORY INFORMATION

# **OSHA Hazards**

Flammable Liquid

# **DSL Status**

All components of this product are on the Canadian DSL list.

# **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

Fire Hazard

# Massachusetts Right To Know Components

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

# **Pennsylvania Right To Know Components**

2-Bromo-2-methylpropane CAS-No. Revision Date 507-19-7 1989-12-01

# **New Jersey Right To Know Components**

2-Bromo-2-methylpropane CAS-No. Revision Date 507-19-7 1989-12-01

www.sigma-aldrich.com

# California Prop. 65 Components

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

# **16. OTHER INFORMATION Further information** Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. 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. Sigma-Aldrich Co., 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. Sigma-Aldrich Corporation