#### SIGMA-ALDRICH

### Material Safety Data Sheet

Date Printed: 16/JUN/2005
Date Updated: 12/MAR/2004
Version 1.3
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

## 1 - Product and Company Information

Product Name 3-BROMOTHIOPHENE, 97%
Product Number 106224

Company Sigma-Aldrich Pty. Ltd.
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### 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number None
3-BROMOTHIOPHENE	872-31-1	212-821-3	

Formula C4H3BrS Molecular Weight 163.04 AMU

### 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Flammable.

# 4 - First Aid Measures

#### AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

#### AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

## AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

### 5 - Fire Fighting Measures

## EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate

foam. Water spray.

#### SPECIAL RISKS

Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### 6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Evacuate area.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

### 7 - Handling and Storage

#### HANDLING

Directions for Safe Handling: Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### **STORAGE**

Conditions of Storage: Keep tightly closed. Keep away from heat and open flame.

## 8 - Exposure Controls / Personal Protection

#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

## PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator. Hand Protection: Compatible chemical-resistant gloves. Eye Protection: Chemical safety goggles.

## 9 - Physical and Chemical Properties

Appearance	Physical State: Clear liquid Color: Light brown-yellow Odor: Stench.		
Property	Value	At Temperature or Pressure	
pH BP/BP Range MP/MP Range Flash Point Flammability	N/A 45 - 47 °C N/A 52 °C N/A	30 mmHg Method: closed cup	

Autoignition Temp N/A
Oxidizing Properties N/A
Explosive Properties N/A
Explosion Limits N/A
Vapor Pressure N/A

SG/Density 1.721 g/cm3

Partition Coefficient N/A Viscosity N/AVapor Density N/ASaturated Vapor Conc. N/A Evaporation Rate N/ABulk Density N/ADecomposition Temp. N/ASolvent Content N/AWater Content N/ASurface Tension N/AConductivity N/A Miscellaneous Data N/ASolubility N/A

## 10 - Stability and Reactivity

#### STABILITY

Stable: Stable.

Materials to Avoid: Strong bases, Strong oxidizing agents, Strong reducing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur oxides, Hydrogen sulfide gas, Hydrogen bromide gas.

#### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

### 11 - Toxicological Information

## SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Nausea, headache, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and

upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

## 12 - Ecological Information

No data available.

# 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

RID/ADR

UN#: 1993 Class: 3 PG: III

Proper Shipping Name: Flammable liquid, n.o.s.

**IMDG** 

UN#: 1993 Class: 3 PG: III

Proper Shipping Name: Flammable liquid, n.o.s.

Marine Pollutant: No

Severe Marine Pollutant: No Technical Name: Required

IATA

UN#: 1993 Class: 3 PG: III

Proper Shipping Name: Flammable liquid, n.o.s.

Inhalation Packing Group I: No

Technical Name: Required

### 15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

R-PHRASES: 10 Flammable.

S-PHRASES: 23 24/25

Do not breathe vapor. Avoid contact with skin and eyes.

#### 16 - Other Information

#### WARRANTY

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 quarantee of the properties of the product. Sigma-Aldrich 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. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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