# MACKLIN®

# SAFETY DATA SHEET

## 1. IDENTIFICATION

Product name: 4'-Bromobenzo-15-crown 5-Ether CAS No. : 60835-72-5 Brand: Macklin Company: Shanghai Macklin Biochemical Co.,Ltd. Address: Shanghai Pudong Zhangjiang High-tech Park; 1st Building, 68 Huatuo Road; SHANGHAI CHINA Zip code: 201206 Telephone: +86 21-50706066 Fax: +86 21-50706099 E-mail: sales@macklin.cn; tech@macklin.cn Revision date: 2019/12/12

## 2. HAZARDS IDENTIFICATION

GHS classification PHYSICAL HAZARDS

no data available

HEALTH HAZARDS

no data available

ENVIRONMENTAL HAZARDS

no data available

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word no data available Hazard statements no data available Precautionary statements Prevention no data available

> Response no data available

> Storage no data available

> Disposal no data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components:4'-Bromobenzo-15-crown 5-Ether CAS No.:60835-72-5 Chemical Formula: $C_{14}H_{19}BrO_5$ 

## 4. FIRST AID MEASURES

4.1Description of necessary first-aid measures If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2Most important symptoms/effects, acute and delayed no data available

4.3Indication of immediate medical attention and special treatment needed, if necessary no data available

#### 5. FIRE-FIGHTING MEASURES

5.1Suitable extinguishing media Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2Specific hazards arising from the chemical no data available

5.3Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

6.1Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

#### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials. Store under inert gas.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure limit values

no data available

Biological limit values no data available

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Personal protective equipment

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Respiratory protection** 

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards no data available

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state no data available

Colour no data available

Odour no data available

Melting point/freezing point no data available

Boiling point or initial boiling point and boiling range no data available

Flammability no data available

Lower and upper explosion limit/flammability limit no data available

Flash point no data available

Auto-ignition temperature no data available

Decomposition temperature no data available

pH no data available

Kinematic viscosity

no data available

Solubility no data available

Partition coefficient n-octanol/water no data available

Vapour pressure no data available

Density and/or relative density no data available

Relative vapour density no data available

Particle characteristics no data available

#### **10. STABILITY AND REACTIVITY**

10.1Reactivity no data available

10.2Chemical stability no data available

10.3Possibility of hazardous reactions no data available

10.4Conditions to avoid no data available

10.5Incompatible materials no data available

10.6Hazardous decomposition products no data available

#### **11. TOXICOLOGICAL INFORMATION**

Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available

Skin corrosion/irritation no data available

Serious eye damage/irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity

Reproductive toxicity no data available

STOT-single exposure no data available STOT-repeated exposure no data available

Aspiration hazard no data available

## **12. ECOLOGICAL INFORMATION**

12.1Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2Persistence and degradability no data available

12.3Bioaccumulative potential no data available

12.4Mobility in soil no data available

12.50ther adverse effects no data available

## **13. DISPOSAL CONSIDERATIONS**

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

#### **14. TRANSPORT INFORMATION**

14.1UN Number ADR/RID: no data available IMDG: no data available IATA: no data available 14.2UN Proper Shipping Name ADR/RID: no data available IMDG: no data available IATA: no data available 14.3Transport hazard class(es) ADR/RID: no data available IMDG: no data available IATA: no data available 14.4Packing group, if applicable ADR/RID: no data available IMDG: no data available IATA: no data available 14.5Environmental hazards ADR/RID: No IMDG: No IATA: No 14.6Special precautions for user no data available

14.7Transport in bulk according to IMO instruments no data available

# **15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture National regulatory information

Other regulations Please pay attention on the waste treatment should also comply with local regulations requirement.

#### **16. OTHER INFORMATION**

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.