# MATERIAL SAFETY DATA SHEET

Date: 2020-12-02

# 1. Name of product and company

1.1 Chemical name: 4-Bromobutyloxycyclohexane

CAS-nr: 21782-58-1

1.2 **Uses:** Laboratory chemical used as intermediate in organic synthesis.

1.3 Supplier: Ramidus AB

Ideon Science Park SE-22370 Lund

Sweden

1.4 Emergency telephone numbers

Tel: +46 46 286 2850 Fax: +46 46 286 2851

Contact person: Hans Holmberg e-mail: hans.holmberg@ramidus.se

1(4)

Tel (off office): +46 (0)720241365

### 2. Hazards identification

# 2.1 Classification and labelling according to Regulation (EC) No 1272/2008 (CLP)

### **Physical hazards**

None known

#### **Health hazards**

Toxicity (Inhalation) (4) Irritation on the skin (2) Eye irritation (2)

### **Environmental hazards**

None known

### 2.2 Labeling

Signal word: Danger



#### **Hazard statements**

H 332 Harmful if inhaled.

H 410 Very toxic for marine organisms with long lasting effects.

H 315 Causes skin irritation.

H 319 Causes serious eye irritation.

# **Precautionary statements**

P 270 Do not eat, drink or smoke when using this product.

P 261 Avoid breathing dust.

P 262 Do not get in eyes, on skin or on clothing.

P 264 Wash hands thoroughly after handling.

P 271 Use only in a well-ventilated area.

P 273 Avoid release to the environment.

P 280 Wear protective gloves / protective clothing, eye protection.

P 308+ 312 If exposed or concerned get medical advice or attention.

#### 2.3 Other hazards

Not known.

3 Composition 2(4)

4-Bromobutyloxycyclohexane

CAS-nr: 21782-58-1 95 %

# 4 First aid measures

#### 4.1 Description of first aid measures

General advice Call a physician if symptoms persists

If in eyes Immediately flush eyes with copious amounts of water for at least 15 minutes.

Call a physician.

If on skin Immediately wash skin with soap and plenty of water for at least 15 minutes.

Call a physican if you feel unwell.

Call a physican if you feel unwell If swallowed

If inhaled remove to fresh air. If not breathing give artificial respiration. If inhaled

If breathing is difficult, give oxygen. Call a physician.

Protection of first-aiders Inform the medicinal personel about the substance and make

sure they protect themselves and don't further contamination.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available

# 4.3 Indication of any immediate medical attention and special treatment needed

No data available

# 5 Fire fighting measures

**5.1 Extinguishing media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.

**5.2 Unusual hazards:** Emit toxic fumes of hydrogen bromide.

5.3 Advice for firefigthers: Fire-extinguishing work is done from the windward and the suitable

fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in

the surrondings: Remove movable containers if safe to do so.

When extinguishing fire, be sure to wear personal protective equipment.

# 6 Accidental release measures

Personal protective gear Wear respirator, chemical safety goggles and rubber gloves.

**Environmental protection** Do not release to the environment

Methods for disposal Sweep up, place in a bag and hold for disposal.

Ventilate area and wash spill site after material pick up is complete.

**Cross references** See sections 8 and 13.

### Handling and storage

7.1 Precautions for Handling should be performed in a hood or well ventilated area. safe handling

Wear suitable protective equipment. Prevent dispersion of dust.

Keep away from heat/sparks/open flame/hot surfaces. No smoking.

Take measures to prevent the build up of electrostratic charge. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a

local exhaust if dust or aerosol will be generated. Avoid all contact.

7.2 Conditions for Keep container tightly closed. Store oin a cool dark place. Store locked up.

safe storage Store away from incompatible materials such as oxidizing agents.

7.3 Specific end uses No further relevant information available.

# 8 Exposure control / personal protection

3(4)

8.3 Control parameters Not known.

**8.4 Exposure control** Install a closed system or local exhaust.

Also install safety shower and eye bath.

**Respiratory**protection
Dust respirator, self-contained breathing apparatus, supplied air respirator, etc.
Use respirators approved under appropriate government standards and follow

local national regulations.

Hand protection Impervious gloves.

**Eye protection** Safety googles. A face-shield, if the situation requires.

**Skin and body protection** Impervious protective clothing.

Protective boots, if the situation requires.

**8.5** Work in a well ventilated area. Use chemical safety goggles and compatible chemical resistant gloves. Use suitable respirator. Avoid contact with eyes, skin and clothing. Avoid prolonged and repeated exposure. Wash thoroughly after handling.

# 9 Physical and chemical properties

Brown liquid.

# 10 Stability and reactivity

10.3	Reactivity	No data available.
10.4	Chemical stability	Stable under proper conditions.
10.5	Possibility of hazardous reactions	No special reactivity has been reported.
10.6	Conditions to avoid	Sparks. Open flames.
10.7	Incompatible materials	Strong bases and oxidizing or reducing agents.
10.8	Hazardous decomposition products	Hydrogen bromide.

# 11. Toxicological information

No data available.

# 12. Ecotoxicological effects.

Very toxic for marine organisms with long lasting effects.

# 13. Disposal considerations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and a scrubber. Observe all federal, state and local environmental regulations.

# 14. Transport information

**14.1 UN number** 2810

**14.2 UN proper shipping name** Toxic liquid, organic, n.o.s.

# 14.3 Transport hazard class(es) 4(4)

ADR/RID 6.1: Toxic liquid, organic, n.o.s. IMDG/IMO 6.1: Toxic liquid, organic, n.o.s. ICAO/IATA 6.1: Toxic liquid, organic, n.o.s.

# 14.4 Packing group

ADR/RID III. IMDG/IMO III. ICAO/IATA III.

### 14.5 Environmental hazards

Very toxic for marine organisms with long lasting effects.

# 14.6 Special precautions for user

No special precautions needed.

# 15. Regulatory information

# 15.1 Safety, health and environmental regulation/legislation specific for the substance

Water Hazard Classes (WGK)

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No 1907/2006

Not listed. Not listed.

**15.2 Chemical safety assessment** A chemical safety assessment has not been carried out.

# 16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.