

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 06.04.2006

### **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

#### 1.1 Product identifier

Trade name

Stock number:

CAS Number:

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

#### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

**4-(Bromomethyl)-2(1H)-quinolinone**

B25305

4876-10-2

Alfa Aesar GmbH &amp; Co.KG

A Johnson Matthey Company

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Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)

Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R34: Causes burns.

Information concerning particular hazards for human and environment:

Other hazards that do not result in classification

Not applicable

Lachrymator

#### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

Precautionary statements

The substance is classified and labelled according to the CLP regulation.

GHS05

Danger

H314 Causes severe skin burns and eye damage.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

vPvB:

Not applicable.

Not applicable.

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

CAS# Designation:

4876-10-2 4-(Bromomethyl)-2(1H)-quinolinone

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

##### General information

After inhalation

Instantly remove any clothing soiled by the product.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Seek immediate medical advice.

After skin contact Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

No further relevant information available.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Suitable extinguishing agents

If this product is involved in a fire, the following can be released:

5.2 Special hazards arising from the substance or mixture

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Hydrogen bromide (HBr)

#### 5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Wear full protective suit.

### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:

Use neutralizing agent.

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**Prevention of secondary hazards:**  
6.4 Reference to other sections

Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
No special measures required.  
See Section 7 for information on safe handling  
See section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Keep containers tightly sealed.  
Store in cool, dry place in tightly closed containers.  
Ensure good ventilation/exhaustion at the workplace.

**Information about protection against explosions and fires:**

No information known.

**7.2 Conditions for safe storage, including any incompatibilities****Storage**

No special requirements.

**Requirements to be met by storerooms and containers:**

Store away from oxidizing agents.

**Information about storage in one common storage facility:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

**Further information about storage conditions:**

No further relevant information available.

**7.3 Specific end use(s)****SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**8.1 Control parameters****Components with critical values that require monitoring at the workplace:**

Not required.

No data

**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Use breathing protection with high concentrations.

Check protective gloves prior to each use for their proper condition.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Impervious gloves

Not determined

Tightly sealed safety glasses.

Full face protection

Protective work clothing.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Powder

White

Not determined

Not determined.

**pH-value:**

Not applicable.

**Change in condition**

252 °C (dec)

Not determined

Not determined

**Flash point:**

Not applicable

**Inflammability (solid, gaseous)**

Not determined.

**Ignition temperature:**

Not determined

**Decomposition temperature:**

Not determined

**Self-inflammability:**

Not determined.

**Danger of explosion:**

Product is not explosive.

**Critical values for explosion:**

Not determined

Not determined

**Lower:**

Not determined

**Upper:**

Not determined

**Steam pressure:**

Not applicable.

**Density**

Not determined

**Relative density**

Not determined.

**Vapour density**

Not applicable.

**Evaporation rate**

Not applicable.

**Solubility in / Miscibility with**

Water:

Insoluble

Not determined.

**Partition coefficient (n-octanol/water):**

Not applicable.

**Viscosity:**

Not applicable.

Not applicable.

**9.2 Other information**

No further relevant information available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No information known.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions**

No dangerous reactions known

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**10.5 Incompatible materials:**Oxidizing agents  
Bases**10.6 Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Nitrogen oxides (NOx)  
Hydrogen bromide**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**LD/LC50 values that are relevant for classification:**

No data

Causes severe skin burns.

**Skin irritation or corrosion:**

Causes serious eye damage.

**Eye irritation or corrosion:**

No sensitizing effect known.

**Sensitization:**

No effects known.

**Germ cell mutagenicity:**

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Carcinogenicity:**

No effects known.

**Reproductive toxicity:**

No effects known.

**Specific target organ system toxicity - repeated exposure:**

No effects known.

**Specific target organ system toxicity - single exposure:**

No effects known.

**Aspiration hazard:**

No effects known.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

**SECTION 12: Ecological information****12.1 Toxicity**

No further relevant information available.

**Aquatic toxicity:**

No further relevant information available.

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Additional ecological information:**

Do not allow material to be released to the environment without proper governmental permits.

Generally not hazardous for water.

Avoid transfer into the environment.

**General notes:**

Not applicable.

Not applicable.

No further relevant information available.

**12.5 Results of PBT and vPvB assessment****PBT:**

Not applicable.

**vPvB:**

Not applicable.

**12.6 Other adverse effects**

No further relevant information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation:**

Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

Consult state, local or national regulations for proper disposal.

**Uncleaned packagings:**

Disposal must be made according to official regulations.

**Recommendation:****SECTION 14: Transport information****UN-Number****ADR, IMDG, IATA**

UN3261

**14.2 UN proper shipping name****ADR**

3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-(Bromomethyl)-

**IMDG, IATA**2(1H)-quinolinone)  
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-(Bromomethyl)-2(1H)-quinolinone)**14.3 Transport hazard class(es)****ADR****Class Label****IMDG, IATA**

8 (C4) Corrosive substances.

8

**Class Label**

8 Corrosive substances.

8

**Packing group****ADR, IMDG, IATA**

III

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user**

Warning: Corrosive substances.

**Kemler Number:**

80

**EMS Number:**

F-A, S-B

**Segregation groups**

Acids

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**Transport/Additional information:****ADR****Excepted quantities (EQ):**

E1

**Limited quantities (LQ)**

5 kg

**Transport category**

3

**Tunnel restriction code**

E

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**UN "Model Regulation":**

UN3261, CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-(Bromomethyl)-2(1H)-quinolinone), 8, III

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Australian Inventory of Chemical****Substances****Standard for the Uniform Scheduling of****Drugs and Poisons****National regulations****Information about limitation of use:****Water hazard class:****Other regulations, limitations and prohibitive regulations****ELINCS (European List of Notified Chemical****Substances)****Substances of very high concern (SVHC)****according to REACH, Article 57****REACH - Pre-registered substances****15.2 Chemical safety assessment:**

Substance is not listed.

Substance is not listed.

For use only by technically qualified individuals.

Employment restrictions concerning young persons must be observed.

Generally not hazardous for water.

Substance is not listed.

Substance is not listed.

Substance is not listed.

A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Régulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

DE/E