

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

**1.1 Product identifier**

Trade name **1,2-Benzisothiazol-3-one, 19-21% dispersion in water**

Stock number: S36342

**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:**

Alfa Aesar, A Johnson Matthey Company  
 Shore Road  
 Port of Heysham Industrial Park  
 Heysham Lancashire LA3 2XY  
 United Kingdom  
 Office Tel: +44 (0) 1524 850506  
 Office Fax: +44 (0) 1524 850608  
 Email: uktech@alfa.com  
 www.alfa.com


Informing department: Product safety department.

**1.4 Emergency telephone number:** Call Carechem 24 at +44 (0) 1865 407333 (English only); +44 (0) 1235 239670 (Multi-language)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

 GHS05 corrosion


Eye Dam. 1 H318 Causes serious eye damage.

 GHS07


Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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

 Xn; Harmful


R22: Harmful if swallowed.

 Xi; Irritant

R41: Risk of serious damage to eyes.

 Xi; Sensitising

R43: May cause sensitisation by skin contact.

 N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

**Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Other hazards that do not result in classification** No information known.

**2.2 Label elements**

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS05 GHS07

**Signal word** Danger

**Hazard-determining components of labelling:**

1,2-Benzisothiazol-3-one

**Hazard statements**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P310 Immediately call a POISON CENTER/doctor/...

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell.

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

**2.3 Other hazards**

**Results of PBT and vPvB assessment**










PBT: Not applicable.

vPvB: Not applicable.

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

**3.2 Mixtures**

**Dangerous components:**

CAS: 2634-33-5	1,2-Benzisothiazol-3-one	20.0%
EINECS: 220-120-9	 Xn R22;  Xi R38-41;  Xi R43;  N R50	
Index number: 613-088-00-6	 Eye Dam. 1, H318;  Aquatic Acute 1, H400;  Acute Tox. 4, H302;  Skin Irrit. 2, H315;  Skin Sens. 1, H317	

Trade name **1,2-Benzisothiazol-3-one, 19-21% dispersion in water**

**Additional information** None known.

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**Non-Hazardous Ingredients**

CAS: 7732-18-5 Water  
EINECS: 231-791-2

80.0%

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**After inhalation**

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.

**After swallowing** Seek medical treatment.

**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**5.2 Special hazards arising from the substance or mixture**

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

Carbon monoxide and carbon dioxide

Sulphur oxides (SO<sub>x</sub>)

Nitrogen oxides (NO<sub>x</sub>)

**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 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:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Prevention of secondary hazards:** No special measures required.

**6.4 Reference to other sections**

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**

**Requirements to be met by storerooms and containers:** No special requirements.

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

Water reacts with many metals to give hydrogen, often violently. Water also reacts violently with many reactive organic and inorganic chemicals.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

**7.3 Specific end use(s)** No further relevant information available.

**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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** 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.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes.

Maintain an ergonomically appropriate working environment.

**Breathing equipment:** Use breathing protection with high concentrations.

**Recommended filter device for short term use:**

Use a respirator with organic vapor/acid gas cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

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GB

Trade name **1,2-Benzisothiazol-3-one, 19-21% dispersion in water**

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**Protection of hands:**

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.

**Material of gloves** Nitrile rubber, NBR

**Penetration time of glove material (in minutes)** Not determined

**Eye protection:**

Tightly sealed safety glasses.

Face protection

**Body protection:** Protective work clothing.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**General Information**

**Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellow to brown
<b>Smell:</b>	Not determined
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined
<b>Sublimation temperature / start:</b>	Not determined
<b>Inflammability (solid, gaseous)</b>	Not determined.
<b>Ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Self-inflammability:</b>	Product is not selfigniting.

**Danger of explosion:** Not determined.

**Critical values for explosion:**

<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined
<b>Steam pressure at 20 °C:</b>	23 hPa
<b>Density</b>	Not determined
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Fully miscible
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.

**Solvent content:**  
**Organic solvents:** 0.0 %

**Solids content:** 20.0 %  
**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**

Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.

Water reacts violently with alkali metals.

**10.5 Incompatible materials:** No information known.

**10.6 Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Sulphur oxides (SOx)

Nitrogen oxides (NOx)

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity:**

Harmful if swallowed.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.

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

**2634-33-5 1,2-Benzisothiazol-3-one**

Oral | LD50 | 1020 mg/kg (rat)

**Skin irritation or corrosion:** May cause irritation

**Eye irritation or corrosion:** Causes serious eye damage.

**Sensitization:** May cause an allergic skin reaction.

**Germ cell mutagenicity:** The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

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

**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.

**Subacute to chronic toxicity:** No effects known.

**Additional toxicological information:**

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

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest

version:  
Harmful  
Irritant

Trade name **1,2-Benzisothiazol-3-one, 19-21% dispersion in water**

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**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.

**Ecotoxicological effects:**

**Remark:** Very toxic for fish

**Additional ecological information:**

**General notes:**

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

Water hazard class 2 (Self-assessment): hazardous for water.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Avoid transfer into the environment.

Very toxic for aquatic organisms

**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:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleaning agent:** Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

**UN-Number**

**ADR, IMDG, IATA**

UN3082

**14.2 UN proper shipping name**

**ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Benzisothiazol-3-one)

**IMDG, IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Benzisothiazol-3-one)

**14.3 Transport hazard class(es)**

**ADR**



**Class  
Label  
IMDG**

9 (M6) Miscellaneous dangerous substances and articles.

9



**Class  
Label  
IATA**

9 Miscellaneous dangerous substances and articles.

9



**Class  
Label**

9 Miscellaneous dangerous substances and articles.

9

**Packing group  
ADR, IMDG, IATA**

III

**14.5 Environmental hazards:**

**Marine pollutant:**

No

**Special marking (ADR):**

Symbol (fish and tree)

**Special marking (IATA):**

Symbol (fish and tree)

**14.6 Special precautions for user**

**Kemler Number:**

Warning: Miscellaneous dangerous substances and articles.

**EMS Number:**

90

F-A,S-F

**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)**

5L

**Transport category**

3

**Tunnel restriction code**

E

**UN "Model Regulation":**

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Benzisothiazol-3-one), 9, III

Trade name **1,2-Benzisothiazol-3-one, 19-21% dispersion in water**

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### **SECTION 15: Regulatory information**

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **Australian Inventory of Chemical Substances**

All ingredients are listed.

##### **Standard for the Uniform Scheduling of Drugs and Poisons**

None of the ingredients is listed.

##### **National regulations**

###### **Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

For use only by technically qualified individuals.

**Classification according to VbF:** Not applicable

**Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

###### **Other regulations, limitations and prohibitive regulations**

##### **ELINCS (European List of Notified Chemical Substances)**

None of the ingredients is listed.

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

None of the ingredients are listed.

##### **REACH - Pre-registered substances**

All ingredients are listed.

**15.2 Chemical safety assessment:** 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.

#### **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

R22 Harmful if swallowed.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

**Department issuing SDS:** Global Marketing Department

#### **Abbreviations and acronyms:**

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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

ACGIH: American Conference of Governmental Industrial Hygienists (USA)

OSHA: Occupational Safety and Health Administration (USA)

NTP: National Toxicology Program (USA)

IARC: International Agency for Research on Cancer

EPA: Environmental Protection Agency (USA)