

Effective Date 21.01.2016
Revision 4.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Benserazide hydrochloride
CAS-number: 14919-77-8

Reach registration number: NA

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

The uses of the chemical: Research API
Classification of the economic activities (NACE): NA
Use categories (UC62): NA

1.3. Details of the supplier of the safety data sheet:

Manufacturer/importer: Fermion Oy
Street address: Koivu-Mankkaan tie 6 A
Post-office box: P.O. Box 28
Postcode: 02101 Espoo, Finland
Telephone number: +358 10 4261
Telefax: +358 0 9452 1764
E-mail address: chemicalsafety@orion.fi
VAT Reg. No: FI18552129

1.4. Emergency telephone number

Poison Center: +358 9 471 977

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

| | | |
|---|--|-------------------------|
| Classification according to regulation EC 1272/2008 | Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 | H319, H335, H315, |
| H Statements | Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. | |

Effective Date 21.01.2016
Revision 4.0

2.2. Label elements

Hazard Pictograms



Signal word Warning

H Statements

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H315 Causes skin irritation.

P Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing.

2.3. Other hazards

-

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Name of the ingredient | CAS-number: | EC-number | Reach registration number: |
|---------------------------|-------------|-----------|----------------------------|
| Benserazide hydrochloride | 14919-77-8 | 238-991-9 | NA |

Request for Confidentiality by Annex 2 No

Substance indicated Confidential No

Other information -

Effective Date 21.01.2016

Revision 4.0

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

| | |
|-----------------------------|---|
| Special instructions | Helpers should ensure their own protection. Get medical advice/attention. |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If appropriate, give artificial respiration. Get medical advice/attention. |
| Skin contact | Wash with soap and water. Rinse continuously with water for several minutes. Get medical advice/attention. |
| Eye contact | IF IN EYES: Rinse continuously with water for several minutes. Get medical advice/attention. |
| Ingestion | Never give anything by mouth to an unconscious person. Rinse mouth. Get medical advice/attention. |

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

Data not available.

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

Data not available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

| | |
|-------------------------------------|---|
| Suitable extinguishing media | Water spray Alcohol resistant foam Powder Carbon dioxide |
|-------------------------------------|---|

Effective Date 21.01.2016
Revision 4.0

5.2. Special hazards arising from the substance or mixture

May emit toxic fumes of hydrogen chloride and oxides of carbon and nitrogen during heating or fire.

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters Isolating breathing apparatus eg. compressed breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.
Avoid dust formation.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Provide sufficient ventilation.

6.2. Environmental precautions

Do not put into water system, drain or soil.

6.3. Methods and material for containment and cleaning up

Collect spilled powder without dusting into tight closed container.
Collect up into tightly sealable containers for disposal.

6.4. Reference to other sections

See Section 8 and 13

Effective Date 21.01.2016
Revision 4.0

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing.
Avoid dust formation.
Handle in well-ventilated space.
Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Keep cool.
Store in a well ventilated place. Keep container tightly closed.
Store in a dry place.
See incompatible materials in section 10.5.

7.3. Specific end use(s)

No information identified.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| | |
|--------------------------|---|
| International OEL values | - |
| DNELs | - |
| PNECs | - |

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety procedures.
Wash hands thoroughly after handling.

Respiratory protection

Use respirator, filtration P3. In laboratories work in fume hood or under dust control hood.
See particular department's regulations of protection.

Hand protection

Use protective gloves (e.g. nitrile or neopren gloves).

Eye protection

Use protective goggles.

Effective Date 21.01.2016
Revision 4.0

Skin protection

Wear protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

| | |
|-----------------|-------|
| Physical state | Solid |
| Colour | - |
| Odour | - |
| Odour threshold | - |

9.1. Information on basic physical and chemical properties**9.2. Other information**

-

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

-

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

-

10.4. Conditions to avoid

-

10.5. Incompatible materials

Strong oxidants

Effective Date 21.01.2016
Revision 4.0

10.6 Hazardous decomposition products

May emit toxic fumes of hydrogen chloride and oxides of carbon and nitrogen during heating or fire.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

| | |
|--|--|
| Acute toxicity | May be harmful if swallowed. May be harmful if inhaled. May be harmful if absorbed through the skin. Swallowing of the substance may induce: coordination dysfunctions respiratory disturbance changes in the sleep pattern changes in the reflexes LD50: 5300 mg/kg rat, oral |
| Skin irritation and corrosion | Causes skin irritation. |
| Skin sensitization | Data not available. |
| Serious eye damage and irritation | Causes serious eye irritation. |
| Respiratory irritation | May cause respiratory irritation. |
| Respiratory sensitization | Data not available. |
| Carcinogenicity | No component of this product present at levels greater than or equal to 0,1 % is identified as probable, possible or confirmed human carcinogen by IARC. |
| Germ cell mutagenicity | Data not available. |
| Reproductive toxicity | Data not available. |
| STOT-single exposure | Data not available. |

Effective Date 21.01.2016
Revision 4.0

STOT-repeated exposure Data not available.

Aspiration hazard Data not available.

Repeated dose toxicity Data not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity

Data not available.

Toxic effects on other organisms

Data not available.

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

Octanol-water partition coefficient(KOW) Data not available.

Bioconcentration factor Data not available.

12.4. Mobility in soil

Data not available.

Effective Date 21.01.2016
Revision 4.0

12.5. Results of PBT and vPvB assessment

Data not available.

12.6. Other adverse effects

Data not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Chemical incinerator equipped with an afterburner and scrubber is the recommended method of disposal for this material. Observe all local and national regulations when disposing of this material.

SECTION 14: TRANSPORT INFORMATION

14.1. UN Number

-

14.2. UN Proper shipping name

14.3. Transport hazard class(es) (ADR/RID,IMDG,ICAO/IATA)

This product is not regulated under the transport regulations.

14.4. Packing group

-

14.5. Environmental hazard

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

Effective Date 21.01.2016
Revision 4.0

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for substance or mixture

-

15.2. Chemical Safety Assessment

No

SECTION 16: OTHER INFORMATION

Further 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. 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 guarantee of the properties of the product. Fermion Oy shall not be held liable for any damage resulting from handling or from contact with the above product.

Sources of key data used to compile the Safety Data Sheet

Information provided by the supplier

Information which has been added, deleted or revised

Update of the template

Updated section / sections:

1, 8