

HYDROXYLAMINE HYDROCHLORIDE SOLUTION (251) LEAD USP

Date 25.5.2011

Previous date: -

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier****1.1.1 Commercial Product Name**

HYDROXYLAMINE HYDROCHLORIDE SOLUTION (251) LEAD USP

1.1.2 Product code

FF6111 100 ML

1.2 Relevant identified uses of the substance or mixture and uses advised against**1.2.1 Recommended use**

MP0112 - Laboratory use: R&D laboratory use

1.3 Details of the supplier of the safety data sheet**1.3.1 Supplier**

Oy FF-Chemicals Ab

P.O.Box

Teollisuustie 4

Postcode and post office

FI-90830 Haukipudas

Finland

Telephone

+358 (0)8 5563 193

Telefax

+358 (0)8 5563 194

Email

ffc@ff-chemicals.fi

1.4 Emergency telephone number**1.4.1 Telephone number, name and address**

Emergency telephone number 112

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****1272/2008 (CLP)**

Acute Tox. 4, H302

Acute Tox. 4, H312

Carc. 2, H351

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

STOT RE 2, H373

Met. Corr. 1, H290

67/548/EEC - 1999/45/EC

Xn, N; R40-21/22-48/22-36/38-43-50

2.2 Label elements**1272/2008 (CLP)**

GHS09 - GHS07 - GHS08

Signal word

Danger**Hazard Statements**

H302

Harmful if swallowed.

H312

Harmful in contact with skin.

H351

Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H317

May cause an allergic skin reaction.

H373

May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H290

May be corrosive to metals.



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Precautionary Statements

- P273 Avoid release to the environment.
 P281 Use personal protective equipment as required.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

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3. COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Hazardous components**

| CAS/EC and Reg. number | Chemical name of the substance | Concentration | Classification |
|------------------------|--|---------------|--|
| 5470-11-1 | Hydroxylammonium chloride | 20 % | Xn; R22-48/22; Xi; R36/38; R43; N; R50 Met. Corr. 1; Carc. 2; Acute Tox. 4 *; Acute Tox. 4 *; STOT RE 2 *; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1 |
| 1336-21-6 | Ammonia...% | 0,25 % | C; R34; N; R50; Skin Corr. 1B; Aquatic Acute 1 |
| 20624-25-3 | Sodium diethyldithiocarbamate trihydrate | 0,4 % | Xn; R22; N; R50; Acute Tox. 4, Aquatic Acute 1 |
| - | Hydrochloric acid < 10 % | < 10 % | C; R34; Xi; R37; Skin Corr. 1B; STOT SE 3 |

4. FIRST AID MEASURES**4.1 Description of first aid measures**

Remove victim from exposure and then have him lie down in the recovery position. Take off all contaminated clothing immediately. First aider needs to protect himself.

4.1.2 Inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

4.1.3 Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

4.1.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Call a physician.

4.1.5 Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions. Irritation.

4.3 Indication of immediate medical attention and special treatment needed

IF exposed: Immediately call a POISON CENTER or doctor/physician. Show this safety data sheet to the doctor in attendance.

5. FIREFIGHTING MEASURES

Not combustible.

5.1 Extinguishing media**5.1.1 Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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5.1.2 Extinguishing media which must not be used for safety reasons

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5.2 Special hazards arising from the substance or mixture

Burning produces irritant fumes.

5.3 Advice for firefighters

In the event of fire and/or explosion do not breathe fumes.

5.4 Specific methods

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6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Evacuate area. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray.

6.2 Environmental precautions

Try to prevent the material from entering drains or water courses.

6.3 Methods and materials for containment and cleaning up

Absorb spillage to prevent material damage.

6.4 Reference to other sections

4, 8, 13.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Prevent vapour buildup by providing adequate ventilation during and after use.

Wear personal protective equipment. Avoid prolonged or repeated breathing of vapour. Avoid prolonged contact with eyes, skin and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

7.3 Specific end use(s)

-

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****8.1.1 Threshold limits**

| | | |
|--------------|----------------------------|--------------------------------|
| Ammonia | 20 ppm (8 h) | 50 ppm (15 min) |
| | 14 mg/m ³ (8 h) | 36 mg/m ³ (15 min) |
| Hydrochloric | 5 ppm (15 min) | 7,6 mg/m ³ (15 min) |

8.1.2 Other information on limit values

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8.1.3 Limit values in other countries

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8.1.4 DNELs

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8.1.5 PNECs

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8.2 Exposure controls**8.2.1 Appropriate engineering controls**

Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling For environmental protection remove and wash all contaminated protective equipment before re-use.

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- 8.2.2 Individual protection measures**
- 8.2.2.1 Respiratory protection**
Respiratory protection complying with EN 143.
- 8.2.2.2 Hand protection**
Protective gloves complying with EN 374.
- 8.2.2.3 Eye/face protection**
Safety glasses with side-shields
- 8.2.2.4 Skin protection**
Lab coat.
- 8.2.3 Environmental exposure controls**
Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Important Health Safety and Environmental Information**
- 9.1.1 Appearance**
Liquid.
- 9.1.2 Odour** no data available
- 9.1.3 Odour threshold** no data available
- 9.1.4 pH** no data available
- 9.1.5 Melting point/freezing point** no data available
- 9.1.6 Initial boiling point and boiling range** no data available
- 9.1.7 Flash point** no data available
- 9.1.8 Evaporation rate** no data available
- 9.1.9 Flammability (solid, gas)** no data available
- 9.1.10 Explosive properties**
- 9.1.10.1 Lower explosion limit** no data available
- 9.1.10.2 Upper explosion limit** no data available
- 9.1.11 Vapour pressure** no data available
- 9.1.12 Vapour density** no data available
- 9.1.13 Relative density** no data available
- 9.1.14 Solubility(ies)**
- 9.1.14.1 Water solubility** soluble
- 9.1.14.2 Fat solubility (solvent - oil to be specified)** no data available
- 9.1.15 Partition coefficient: n-octanol/water** no data available
- 9.1.16 Auto-ignition temperature** no data available
- 9.1.17 Decomposition temperature** no data available
- 9.1.18 Viscosity** no data available
- 9.1.19 Explosive properties** -
- 9.1.20 Oxidising properties** -
- 9.2 Other information**
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10. STABILITY AND REACTIVITY

- 10.1 Reactivity**
No information available.
- 10.2 Chemical stability**
The product is chemically stable.

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- 10.3 Possibility of hazardous reactions**
This information is not available.
- 10.4 Conditions to avoid**
Heating or fire conditions liberates toxic gas.
- 10.5 Incompatible materials**
No information available.
- 10.6 Hazardous decomposition products**
Gaseous hydrogen chloride (HCl). nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects**
- 11.1.1 Acute toxicity**
No data is available on the product itself.
LD50/oral/rat = 141 mg/kg
Information refers to the main component.
Harmful if swallowed.
- 11.1.2 Irritation and corrosion**
Causes skin irritation. Causes serious eye irritation.
- 11.1.3 Sensitisation**
May cause an allergic skin reaction.
- 11.1.4 Subacute, subchronic and prolonged toxicity**
Suspected human carcinogen
- 11.1.5 STOT-single exposure**
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- 11.1.6 STOT-repeated exposure**
Harmful: danger of serious damage to health by prolonged exposure if swallowed. Cyanosis.
- 11.1.7 Aspiration hazard**
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- 11.1.8 Other information on acute toxicity**
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12. ECOLOGICAL INFORMATION

- 12.1 Toxicity**
- 12.1.1 Aquatic toxicity**
Very toxic to aquatic life.
- 12.1.2 Toxicity to other organisms**
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- 12.2 Persistence and degradability**
- 12.2.1 Biodegradation**
This information is not available.
- 12.2.2 Chemical degradation**
This information is not available.
- 12.3 Bioaccumulative potential**
Bioaccumulation is unlikely.
- 12.4 Mobility in soil**
Mobile in soils.
- 12.5 Results of PBT and vPvB assessment**
No information available.
- 12.6 Other adverse effects**
Avoid release to the environment.

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13. DISPOSAL CONSIDERATIONS

160506 - laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals

13.1 Waste treatment methods

The product has to be disposed of as laboratory chemical in accordance with local regulations.

14. TRANSPORT INFORMATION

| | Land transport ADR/RID | Sea transport IMDG/IMO | Air transport ICAO/IATA |
|--|--|--|------------------------------------|
| 14.1 UN number | 3082 | 3082 | |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HYDROXYLAMMONIUMCHLORIDE) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HYDROXYLAMMONIUMCHLORIDE) | |
| 14.3 Transport hazard class(es) | 9 | 9 | |
| 14.4 Packing group | III | III | |
| 14.5 Environmental hazards | | | |
| Other information | | | |

14.6 Special precautions for users**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code****15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REGULATION (EC) No 1272/2008
HTP-arvot 2009

15.2 Chemical safety assessment

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16. OTHER INFORMATION**16.2 Key or legend to abbreviations and acronyms**

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16.3 Key literature references and sources for data

REGULATION (EC) No 1272/2008

16.4 Classification procedure

. This product is a mixture. Health hazard information is based on its components.

16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.

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| | |
|--------|---|
| R34 | Causes burns. |
| R36/38 | Irritating to eyes and skin. |
| R37 | Irritating to respiratory system. |
| R40 | Limited evidence of a carcinogenic effect. |
| R43 | May cause sensitization by skin contact. |
| R48/22 | Harmful: danger of serious damage to health by prolonged exposure if swallowed. |
| R50 | Very toxic to aquatic organisms. |

16.6 Training advice

Provide adequate information, instruction and training for operators.

16.7 Recommended restrictions

Avoid prolonged or repeated breathing of vapour.

16.8 Additional information available from:

Oy FF-Chemicals Ab, Tel. +358 8-5563 193
ffc@ff-chemicals.fi

The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.