SIHA Vitamin B1

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

1.1. Product identifier
Trade name/designation:

SIHA Vitamin B1

Additional information:
The substance does not require registration according to REACH.

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture:
Yeast Nutrient

1.3. Details of the supplier of the safety data sheet
Supplier (manufacturer/importer/only representative/downstream user/distributor):
Eaton Technologies GmbH
Langenlonsheim Branch
An den Nahewiesen 24
55450 Langenlonsheim
Germany
Telephone: +49 6704 204-0 (Diese Nummer ist nur zu Bürozeiten besetzt.)
Telefax: +49 6704 204-121
E-mail: SDB@Eaton.com
Website: www.eaton.com/filtration

1.4. Emergency telephone number
No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]:
The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Additional information:
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
According to EC directives or the corresponding national regulations the product does not have to be labelled.

2.3. Other hazards
No data available

SECTION 3: Composition / information on ingredients

3.1. Substances
Description:
Thiamin chloride hydrochloride (CAS Nr.: 67-03-8; EINECS Nr.:200-641-8).

Hazardous ingredients / Hazardous impurities / Stabilisers:

<table>
<thead>
<tr>
<th>product identifiers</th>
<th>Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]</th>
<th>Concentration</th>
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<tr>
<td>CAS No.: 67-03-8</td>
<td>thiamine hydrochloride</td>
<td>100%</td>
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<tr>
<td>EC No.: 200-641-8</td>
<td></td>
<td></td>
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</tbody>
</table>
SECTION 4: First aid measures

4.1. Description of first aid measures

Following inhalation:
Provide fresh air. Remove casualty to fresh air and keep warm and at rest.
In case of respiratory tract irritation, consult a physician.

In case of skin contact:
Subsequently wash off with: Water and soap.
In case of skin irritation, consult a physician.
If ON CLOTHING: Take off immediately all contaminated clothing.

After eye contact:
In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion:
Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Carbon dioxide (CO2), Water spray, Foam, Dry extinguishing powder

Unsuitable extinguishing media:
High power water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Ammonia, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid)
Explosive dust-air mixtures may form.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
In case of fire: Wear self-contained breathing apparatus.
Suppress gases/vapours/mists with water spray jet.
Treat the recovered material as prescribed in the section on waste disposal.

5.4. Additional information
No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Provide adequate ventilation.
Avoid dust formation.

Protective equipment:
Wear personal protection equipment.

6.1.2. For emergency responders

Personal protection equipment:
In case of fire: Wear self-contained breathing apparatus.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 29-Nov-2016
Print date: 29-Nov-2016
Version: 2

SIHA Vitamin B1

6.2. Environmental precautions
Knock down dust with water spray jet.
Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
For cleaning up:
Take up mechanically, placing in appropriate containers for disposal. Wash with plenty of water.

6.4. Reference to other sections
No data available

6.5. Additional information
No data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Protective measures
Advices on safe handling:
Avoid dust formation. Do not breathe dust. The substance should only be handled in closed apparatus or systems. Dust should be exhausted directly at the point of origin.
Use approved industrial vacuum cleaner for removal.

Fire prevent measures:
Take precautionary measures against static discharges.
May form combustible dust concentrations in air.
The product is: Flammable

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels:
Keep/Store only in original container.
Store in a well-ventilated place. Keep container tightly closed.
Keep container dry.

Hints on storage assembly:
Do not store together with: Oxidising agent

Further information on storage conditions:
Protect against: Light, UV-radiation/sunlight

7.3. Specific end use(s)
No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls
See protective measures under point 7 and 8.

8.2.2. Personal protection equipment

Eye/face protection:
Eye glasses

Skin protection:
Hand protection: 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.
Suitable material:
NBR (Nitrile rubber) > 480 min. DIN EN 374
Butyl caoutchouc (butyl rubber) > 480 min. DIN EN 374
SIHA Vitamin B1

Respiratory protection:
Respiratory protection necessary at: insufficient ventilation, high concentrations
Suitable respiratory protection apparatus: Filtering device (DIN EN 147) P 1

Other protection measures:
Protective clothing: Wear personal protection equipment.
Wash contaminated clothing prior to re-use.
General health and safety measures: Do not breathe dust.
Avoid contact with eyes and skin.
When using do not eat, drink, smoke, sniff.
Wash hands before breaks and after work.
Apply skin care products after work.

8.2.3. Environmental exposure controls
No data available

8.3. Additional information
AGW-Value: 3 mg/m³ alveolar dust; 10 mg/m³ respirable dust. Exceeding this limit could cause mechanical obstructions of the respiratory tract.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
- Physical state: Powder
- Colour: white
- Odour: characteristic

Safety relevant basis data

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<th>at °C</th>
<th>Method</th>
<th>Remark</th>
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9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.
Explosive dust-air mixtures may form.
10.2. Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions
Reacts with:
- Oxidising agent, Alkali (lye), Reducing agent, Metal

10.4. Conditions to avoid
- Heat; Humidity; Light

10.5. Incompatible materials
- Alkali (lye), Oxidising agent, Reducing agent, Metal, base

10.6. Hazardous decomposition products
- Violent exothermic decomposition on heating.
- Hazardous decomposition products: Hydrogen cyanide (hydrocyanic acid), Hydrogen chloride (HCl)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:
- Acute toxicity (oral)
  - Mouse LD50: 8224 mg/kg
  - Rat LD50: 3710 mg/kg

Skin corrosion/irritation:
- Irritant effect on the skin: mild irritant.
- May cause respiratory irritation.
- Primary irritations of the mucous membrane:

Respiratory or skin sensitisation:
- May cause sensitisation especially in sensitive humans.
- Rare cases of anaphylactoid shock after parenteral application have been recorded (man).

Germ cell mutagenicity:
- No information available.

Carcinogenicity:
- No information available.

Reproductive toxicity:
- No information available.

STOT-single exposure:
- No information available.

STOT-repeated exposure:
- No information available.

Aspiration hazard:
- No information available.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:
- Acute fish toxicity:
  - Oncorhynchus mykiss (Rainbow trout): LC50: 96h > 100 mg/L OECD 203
  - Oncorhynchus mykiss (Rainbow trout): EC50 48h > 100 mg/L OECD 202
  - Desmodesmus subspicatus: IC50: 72h > 100 mg/L

Terrestrial toxicity:
- Barely toxic for microorganisms (activated sludge).

12.2. Persistence and degradability

Additional information:
- Further ecological information: Readily biodegradable (according to OECD criteria). 74 %, 7 d
SIHA Vitamin B1

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The disposal of the product has to be carried out in accordance with the legal requirements. EWC waste codes are strictly industry-oriented, therefore waste classification has to be done by the waste producer.

Waste treatment options
Appropriate disposal / Package:
Non-contaminated packages may be recycled.

13.2. Additional information
No data available

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1. UN-No.
not relevant

14.2. UN proper shipping name
not relevant

14.3. Transport hazard class(es)
not relevant

14.4. Packing group
not relevant

14.5. Environmental hazards
not relevant

14.6. Special precautions for user
not relevant

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not relevant

SECTION 15: Regulatory information

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

15.1.1. EU legislation
No data available
15.1.2. National regulations

[DE] National regulations

Water hazard class (WGK)

WGK:
1 - schwach wassergefährdend

Source:
S Selbststeinstufung

15.2. Chemical Safety Assessment

No data available

15.3. Additional information

No data available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:
The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

No data available

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.