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

## 1.1. Product identifier

Chinini hydrochloridum

Item No. 06260000

### Substance / product identification

CAS-No. 6119-47-7

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

### Use of the substance/preparation

Manufacture of pharmaceutical products, Chemical for synthesis, Chemical, food additive

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

### Address/Manufacturer

Hänseler AG
Industriestrasse 35
9100 Herisau

| | |
|---|---|
| Telephone no. | 0041 (0)71 353 58 58 |
| E-mail address of person responsible for this SDS | sdb@haenseler.ch |

## 1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

# SECTION 2: Hazards identification ***

## 2.1. Classification of the substance or mixture

### Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

| | |
|---|---|
| Acute Tox. 4 | H302 |
| Skin Sens. 1 | H317 |

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

## 2.2. Label elements

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

### Hazard pictograms

### Signal word

Warning

### Hazard statements ***

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H317 | May cause an allergic skin reaction. |

### Precautionary statements ***

| | |
|---|---|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264.1 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P330 | Rinse mouth. |
| P333+P313 | If skin irritation or rash occours: Get medical advice/attention. |
| P501.3 | Disposal in compliance with local and national regulations. |

### Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains *** Quinine hydrochloride dihydrate

### Reduced labeling (<= 125 ml)

### Hazard pictograms ***

### Signal word ***

Warning

### Hazard statements ***

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H317 | May cause an allergic skin reaction. |

### Precautionary statements ***

| | |
|---|---|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264.1 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P330 | Rinse mouth. |
| P333+P313 | If skin irritation or rash occours: Get medical advice/attention. |
| P501.3 | Disposal in compliance with local and national regulations. |

## 2.3. Other hazards

***

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

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

### Molecular weight

Value 396.9 g/mol

### Hazardous ingredients ***

**Quinine hydrochloride dihydrate**

| | | | |
|---|---|---|---|
| CAS No. | 6119-47-7 | | |
| EINECS no. | 612-097-2 | | |
| Concentration | >= 50 | | % |
| Classification (Regulation (EC) No. 1272/2008) | | | |
| | Acute Tox. 4 | H302 | |
| | Skin Sens. 1 | H317 | |
| ATE | oral | 620 | mg/kg |

# SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Take off contaminated clothing and shoes immediately.

#### After inhalation

Ensure supply of fresh air. Summon a doctor immediately.

#### After skin contact

Wash off immediately with soap and water and rinse well. Consult a doctor if skin irritation persists.

#### After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. By continuous complaints consult a physician.

#### After ingestion

Rinse out mouth and give plenty of water to drink. Summon a doctor immediately.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Water, Carbon dioxide, Foam, Dry powder

### 5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO); Nitrogen oxides (NOx); Hydrochloric acid

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighting

Use self-contained breathing apparatus.

#### Other information

Do not discharge into surface waters/groundwater.

## SECTION 6: Accidental release measures

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

Avoid dust formation. Wear protective equipment

### 6.2. Environmental precautions

Do not allow to enter drains or waterways.

### 6.3. Methods and material for containment and cleaning up

Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Avoid raising dust.

## SECTION 7: Handling and storage ***

### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid dust formation. Avoid contact with skin, eyes and clothing. Wear protective equipment. Provide good ventilation of working area (local exhaust ventilation if necessary).

#### Advice on protection against fire and explosion

Dust can form an explosive mixture with air. Keep away from sources of ignition. Take action to prevent static discharges.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep only in original packaging. Keep tightly closed in a dry and cool place. Protect from exposure to light.

#### Hints on storage assembly

Do not store together with foodstuffs. Do not store together with animal feedstocks.

#### Storage classes

| | | |
|---|---|---|
| Storage class according to TRGS 510 | 11 | Combustible solids |
| Storage category (Switzerland) | 11/13 | Other solid hazardous substances with classification/labelling hazardous |

#### Further information on storage conditions

Protect from direct sunlight. Protect from atmospheric moisture and water.

## SECTION 8: Exposure controls/personal protection ***

### 8.2. Exposure controls

#### Exposure controls

See Section 7. No measures exeeding the ones mentioned necessary.

#### General protective and hygiene measures

Provide adequate ventilation. Do not breathe dust.

#### Respiratory protection

Breathing apparatus in the event of aerosol. Dust mask; Particle filter P2

#### Hand protection ***

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

| | | |
|---|---|---|
| Appropriate Material | nitrile rubber - NBR | |
| Material thickness | 0.4 | mm |

Hand protection must comply with EN 374.

| | | |
|---|---|---|
| Appropriate Material | Butyl rubber - Butyl | |
| Material thickness | 0.4 | mm |
| Appropriate Material | Natural Latex | |
| Material thickness | 0.4 | mm |

Hand protection must comply with EN 374.

#### Eye protection

Safety glasses with side protection shield; Safety goggles; Eye protection must comply with EN 166.

#### Body protection

Protective clothing; Personal protective clothing must comply with the relevant CEN standards.

#### Environmental exposure controls

Do not allow to enter drains or water courses.

## SECTION 9: Physical and chemical properties ***

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | solid |
| **Colour** | white |
| **Odour** | odourless |
| **Physical state** | Powder |
| **Melting point** | |

| | | | | |
|---|---|---|---|---|
| Value | 123 | | | °C |

**Boiling point or initial boiling point and boiling range**

Remarks No data available

**Flash point**

Remarks Not applicable

**Auto-ignition temperature**

| | | | | |
|---|---|---|---|---|
| Value | 400 | | | °C |

**pH value**

| | | | | |
|---|---|---|---|---|
| Value | 6.0 | to | 6.8 | |
| Concentration/H2O | 1 | g/l | | |

**Vapour pressure**

Remarks No data available

**Density and/or relative density**

Remarks No data available

### 9.2. Other information

**Solubility in water**

| | | | |
|---|---|---|---|
| Value | 62.5 | | g/l |
| Temperature | 25 | °C | |

**Bulk density**

| | | |
|---|---|---|
| Value | 310 | kg/m³ |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No decomposition if stored and applied as directed.

### 10.2. Chemical stability

No decomposition if stored and applied as directed.

### 10.3. Possibility of hazardous reactions

No decomposition if stored and applied as directed.

### 10.4. Conditions to avoid

Protect from direct sunlight. To avoid thermal decomposition, do not overheat.

### 10.5. Incompatible materials

Oxidising agents

### 10.6. Hazardous decomposition products

In the event of fire the following can be released: Carbon monoxide and carbon dioxide, nitrous oxides (NOx)

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute oral toxicity**

| | | |
|---|---|---|
| ATE | 620 | mg/kg |
| Method | calculated value according to GHS (e.g see UN GHS) | |
| Remarks | The classification criteria are met. | |

**Acute oral toxicity (Components)**

**Quinine hydrochloride dihydrate**

| | | |
|---|---|---|
| Species | rat | |
| LD50 | 620 | mg/kg |

**Quinine hydrochloride dihydrate**

| | | |
|---|---|---|
| Species | mouse | |
| LD50 | 1160 | mg/kg |

### Acute dermal toxicity

Remarks Based on available data, the classification criteria are not met.

### Acute inhalational toxicity

Remarks Based on available data, the classification criteria are not met.

### Skin corrosion/irritation

Remarks Based on available data, the classification criteria are not met.

### Serious eye damage/irritation

Remarks Based on available data, the classification criteria are not met.

### Serious eye damage/irritation (Components)

**Quinine hydrochloride dihydrate**

evaluation slightly irritant

### Sensitization

evaluation May cause sensitization by skin contact.

Remarks The classification criteria are met.

### Sensitization (Components)

**Quinine hydrochloride dihydrate**

Remarks May cause allergic skin reactions.

### Subacute, subchronic, chronic toxicity

Subacute toxicity

Chronic toxicity

### Mutagenicity

Remarks Based on available data, the classification criteria are not met.

### Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

### Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity (STOT)

**Single exposure**

Remarks Based on available data, the classification criteria are not met.

**Repeated exposure**

Remarks Based on available data, the classification criteria are not met.

### Aspiration hazard

Based on available data, the classification criteria are not met.

## 11.2. Information on other hazards

### Endocrine disrupting properties with respect to humans

This substance does not have endocrine disrupting properties with respect to humans.

### Experience in practice

headache. disorders of the central nervous system. diarrhea. May cause nausea/ vomiting/ asthma. May cause sensitization by inhalation and skin contact.

### Other information

After swallowing: feeling of sickness, vomiting, coma.

Observe the usual precautions for handling chemicals.

# SECTION 12: Ecological information ***

## 12.1. Toxicity

### Fish toxicity (Components)

**Quinine hydrochloride dihydrate**

| | | | |
|---|---|---|---|
| Species | rainbow trout (Oncorhynchus mykiss) | | |
| LC50 | > 100 | | mg/l |
| Duration of exposure | 48 | h | |

### Daphnia toxicity (Components)

**Quinine hydrochloride dihydrate**

| | | | |
|---|---|---|---|
| Species | Daphnia pulex | | |
| EC50 | 28.3 | | mg/l |
| Duration of exposure | 24 | h | |

## 12.2. Persistence and degradability

### Biodegradability (Components)

**Quinine hydrochloride dihydrate**

| | | | |
|---|---|---|---|
| Value | 86.3 | | % |
| Duration of test | 28 | d | |
| evaluation | Readily biodegradable | | |
| Method | OECD 301B / ISO 9439 / EEC 84/449 C5 | | |
| Source | Chinin | | |

## 12.3. Bioaccumulative potential

### Octanol/water partition coefficient (log Pow) (Components)

**Quinine hydrochloride dihydrate**

| | |
|---|---|
| log Pow | 1.78 |

## 12.5. Results of PBT and vPvB assessment

### Results of PBT and vPvB assessment

The Substance does not meet PBT-criteria.
This substance does not meet the vPvB-criteria.

## 12.6 Endocrine disrupting properties

### Endocrine disrupting properties with respect to the envrionment

This substance does not have endocrine disrupting properties with respect to non-target organisms.

## 12.7. Other adverse effects

### General information / ecology

Ecological data are not available.

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

### Disposal recommendations for the product

| | | |
|---|---|---|
| EWC waste code | 07 01 | wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals |

Disposal in compliance with local and national regulations.

### Disposal recommendations for packaging

Dispose of as unused product.

## SECTION 14: Transport information ***

| | Land transport ADR/RID *** | Marine transport IMDG/GGVSee | Air transport ICAO/IATA |
|---|---|---|---|
| **14.1. UN number or ID number** | The product does not constitute a hazardous substance in land transport. | The product does not constitute a hazardous substance in sea transport. | The product does not constitute a hazardous substance in air transport. |
| **14.5. Environmental hazards** | - | | |

## SECTION 15: Regulatory information ***

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

**Water Hazard Class (Germany) ***

| | |
|---|---|
| Water Hazard Class (Germany) | WGK 1 |
| Remarks | Derivation of WGK according to Annex 1 No. 5.2 AwSV |

**Other information ***

The product does not contain substances according to Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH) with a content of >= 0.1% w/w.

## SECTION 16: Other information

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Classification (Regulation (EC) No. 1272/2008)

| | | |
|---|---|---|
| Acute Tox. 4 | H302 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |

**Hazard statements listed in Chapter 2/3**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H317 | May cause an allergic skin reaction. |

**CLP categories listed in Chapter 2/3**

| | |
|---|---|
| Acute Tox. 4 | Acute toxicity, Category 4 |
| Skin Sens. 1 | Skin sensitization, Category 1 |

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.