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

· Informations to product No. 2176
· Product name:

Chininhydrochlorid
Chinin hydrochloridum
Quinine hydrochloride

· Supplier of the Product / responsible Company:
Caesar & Loretz GmbH
Herderstr. 31
40721 Hilden
Tel.: 02103/4994-0
Fax: 02103/32360
e-mail: info@caelo.de

· Emergency telephone:
Giftinformationszentrum Mainz
Langenbeckstr. 1, 55131 Mainz
Tel.: 06131/19240

· Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.

· Application of the substance / mixture:
Ingredient for pharmaceutical drugs or active pharmaceutical ingredient.

2 Hazards identification

· GHS-Labelling Elements:

· Signal word: Danger
· H-Phrases:
H302 Harmful if swallowed
H317 May cause an allergic skin reaction
H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled

· P-Phrases:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection
P301 IF SWALLOWED:
P312 Call a POISON CENTER or doctor/physician if you feel unwell
P302 IF ON SKIN:
P352 Wash with soap and water

Acute Tox. 4
Skin Sens.1
Resp Sens.1
3 Composition / information on ingredients

CAS-No. Substance name
6119-47-7 Quinine hydrochloride dihydrate
- EINECS-No.: 205-001-1
- REACH Reg. No.: (pre-registered)
- INCI-Name: -
- Chemical characterization:

\[
\text{H}_3\text{C} - \text{O} - \text{N} - \text{HCl} - 2\text{H}_2\text{O}
\]

4 First aid measures

- after inhalation: Fresh air. If feeling unwell continuously seek medical advice.
- after skin contact: Wash away with plenty of water.
- after eye contact: Rinse out with plenty of water with the eyelid wide open.
- after swallowing: Drink water. Induce vomiting. Seek medical advice.

5 Fire-fighting measures

- Suitable extinguishing media: All regular extinguishing media can be used. Select fire fighting measures suitable to surrounding environment.
- Specific hazards during fire fighting: Combustible but not flammable. In case of fire dangerous gases / vapours can be released: Hydrogen chloride.
- Special protective equipment for fire-fighters: Suitable protective clothes and respiratory protection.
- Additional information: Prevent fire extinguishing water from contaminating surface water, the ground water system or soil. Residues must be deposited according to local regulations.

6 Accidental release measures

- Personal protective measures: Avoid dust formation and contact with substance.
- Environmental protective measures: Prevent from entering into drains.
- Methods for cleaning: Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.
7 Handling and storage

- **Handling:**
  - **Advice on safe handling:** wear dust protection mask.
  - **Informations to fire or explosion protection:** No special measures required.
- **Storage:**
  - **Requirements for storage areas and containers:** Tightly closed. Store at a dry place. At room temperature (+15°C to +25°C).

8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
  - **General protective and hygiene measures:**
    Keep away from food, beverages and animal food. Wash hands before breaks and after work.
  - **Respiratory protection:** Dust protection mask
  - **Hand protection:** Protection gloves of latex or rubber.
  - **Eye protection:** Safety glasses.

9 Physical and chemical properties

- **Form:** solid
- **Colour:** white
- **Odour:** odourless.
- **Melting point / melting range:** 123 °C
- **Boiling point / boiling range:** not determined
- **Ignition emperature:** ca. 400 °C
- **Flammability (solid, vapours):** The product is not flammable.
- **Explosion hazard:** The product is not hazardous for explosion, but the explosion of dust-air mixtures is possible.
- **Solubility in / Miscibility with**
  - **Water:** 62.5 g/l (25 °C), ca. 2000 g/l (100°C)
  - **Ethanol:** ca. 1 g/l (25 °C)
- **Additional information:** Not readily soluble in Ethanol
- **Bulk density:** 310 kg/m³
- **pH-value:** (1 % in water) 6.0 – 6.8

10 Stability and reactivity

- **Thermical decomposition / conditions to avoid:**
  - Temperatures above room temperature
- **Materials to avoid:** Strong acids and oxidants
- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** Chinotoxine
11 Toxicological information

- **Acute toxicity:**
  - **RTECS#:** CAS# 6119-47-7: Nicht registriert
  - **LD50/LC50:** RTECS: Not available. Andere: Oral, mouse: LD50 = 1160 mg/kg, Oral, rat: LD50 = 1160 mg/kg
  - **Carcinogenity:** Quinine monohydrochloride dihydrate - Von ACGIH, IARC, NTP, or CA Prop 65 not classified as carcinogene.
- **Sensitization:** Possible allergene effect if inhaled or after skin contact.

12 Ecological information

- **General advices:** Prevent from entering sewage water or drainage ditch undiluted or unneutralized.
- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

13 Disposal considerations

- **Product:**
  - **Recommendation:** Disposal according to local regulations as pharmaceutical waste.
- **Empty contaminated packaging:**
  - **Recommendation:** Disposal according to the local regulations.

14 Transport informations

- **Land transport according to ADR:**
  Not classified as dangerous in the meaning of transport regulations.

15 Regulatory information

- **Labelling according to actual legislation (GHS, Globally Harmonized System of Classification and Labelling of Chemicals):**
  The product is classified and labelled according to GHS-regulations.
- **Hazard symbols:** GHS07, GHS08
- **Signal word:** Danger
- **H-Phrases:**
  - H302 Harmful if swallowed
  - H317 May cause an allergic skin reaction
  - H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled
- **P-Phrases:**
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray
  - P280 Wear protective gloves/protective clothing/eye protection/face protection
  - P301 IF SWALLOWED:
  - P312 Call a POISON CENTER or doctor/physician if you feel unwell
  - P302 IF ON SKIN:
  - P352 Wash with soap and water
- **National regulations (Germany):**
- **Water hazard class:** see chapter 12
· Storage class TRGS 510: 11

16 Other Information

The information provided in this MSDS is correct to the best of our knowledge at the date of edition.

· Reason for last revision: Adjustment to regulation (EC) 1907/2006 (REACH) and GHS-labelling system.