1 Identification of substance

- **Product details**
- **Trade name**: Guanidine hydrochloride
- **Manufacturer/Supplier:**
  QIAGEN GmbH, QIAGEN Str. 1, 40724 Hilden, Germany
  Tel.: (+49)-2103/29-0
- **Information department:**
  QIAGEN Technical Service
  QIAGEN Inc., 27220 Turnberry Lane, Valencia, CA 91355, USA
  Tel.: 1-800-DNA-PREP (1-800-362-7737)
  Email: techservice-us@qiagen.com
- **Emergency information:**
  CHEMTREC
  USA & Canada 1-800-424-9300
  Outside USA & Canada +1 703-527-3887

2 Composition/Data on components

- **Chemical characterization:**
- **CAS No. Description**
  50-01-1 guanidinium chloride
- **Identification number(s)**
  - **EINECS Number**: 200-002-3
  - **EU Number**: 607-148-00-0

3 Hazards identification

- **Hazard description:** Harmful
- **Information pertaining to particular dangers for man and environment:**
  Harmful if swallowed.
  Irritating to eyes and skin.
- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    Health = 2
    Fire = 0
    Reactivity = 0
  - **WHMIS-ratings (scale 0 - 4)**
    Health = 2
    Fire = 0
    Reactivity = 0

4 First aid measures

- **After inhalation**: Supply fresh air; consult doctor in case of complaints.
- **After skin contact**: Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**: Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**: Immediately call a doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Trade name: Guanidine hydrochloride

**6 Accidental release measures**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Do not allow to enter sewers/surface or ground water.
- **Measures for cleaning/collection:** Dispose contaminated material as waste according to item 13.

**7 Handling and storage**
- **Handling:**
  - **Information for safe handling:** Keep receptacles tightly sealed.
  - **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Keep receptacle tightly sealed.

**8 Exposure controls and personal protection**
- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Avoid contact with the eyes and skin.
  - **Protection of hands:** Protective gloves
  - **Material of gloves:** 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.
  - **Penetration time of glove material:**
    The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:** Tightly sealed goggles

**9 Physical and chemical properties**
- **General Information**
  - **Form:** Solid
  - **Color:** White
  - **Odor:** Characteristic
- **Change in condition**
  - **Melting point/Melting range:** 164-169°C (327-336°F)
  - **Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
Trade name: Guanidine hydrochloride

10 Stability and reactivity

- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined.
- **Solubility in / Miscibility with Water:** Soluble.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:**
  - Water hazard class 1 (Assessment by list): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
  - **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **Sara**
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
## Trade name: Guanidine hydrochloride

### TSCA (Toxic Substances Control Act):
- 50-01-1 guanidinium chloride

### Proposition 65

### Chemicals known to cause cancer:
- Substance is not listed.

### Chemicals known to cause reproductive toxicity for females:
- Substance is not listed.

### Chemicals known to cause reproductive toxicity for males:
- Substance is not listed.

### Chemicals known to cause developmental toxicity:
- Substance is not listed.

### Cancerogenity categories
- EPA (Environmental Protection Agency)
- IARC (International Agency for Research on Cancer)
- NTP (National Toxicology Program)
- TLV (Threshold Limit Value established by ACGIH)
- MAK (German Maximum Workplace Concentration)
- NIOSH-Ca (National Institute for Occupational Safety and Health)
- OSHA-Ca (Occupational Safety & Health Administration)
- Substance is not listed.

### Product related hazard informations:
The product has been classified and marked in accordance with directives on hazardous materials.

#### Risk phrases:
- Harmful if swallowed.
- Irritating to eyes and skin.

#### Safety phrases:
- Keep away from food, drink and animal feedingstuffs.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Wear suitable protective clothing.
- If swallowed, seek medical advice immediately and show this container or label.

### National regulations:
- Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.