

# MATERIAL SAFETY DATA SHEET (MSDS)

## **GUANIDINE HYDROCHLORIDE (FOR BIOCHEMISTRY)**

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

1.1. Product identifier

Trade name : GUANIDINE HYDROCHLORIDE (FOR BIOCHEMISTRY)

**Product code** : G0105300500 Identification of the product : Guanidinium chloride CAS No: 50-01-1 EC No :200-002-3

Annex No: 607-148-00-0

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

: Industrial. For professional use only. Use

1.3. Details of the supplier of the safety data sheet

**SUVCHEM** Company identification Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

: + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ] Phone no.

#### **Hazards identification -DSD**

#### 2.1. Classification of the substance or mixture

### Classification EC 67/548 or EC 1999/45

Classification : Xn; R22 Xi; R36/38

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

**Health hazards** : Acute toxicity, Oral - Category 4 - Warning (CLP: Acute Tox. 4) H302

Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315 Eye irritation - Category 2A - Warning (CLP: Eye Irrit. 2) H319

2.2. Label elements

Labelling EC 67/548 or EC 1999/45



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### 2. Hazards identification -DSD (continued)

Symbol(s)

Symbol(s) · Xn · Harmful

R Phrase(s) : R22 : Harmful if swallowed.

R36/38: Irritating to eyes and skin.

: S2: Keep out of the reach of children. S Phrase(s)

S22: Do not breathe dust.

: Guanidinium chloride **Contains** 

### Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words : Warning

**Hazard statements** : H302 : Harmful if swallowed.

H319: Causes serious eye irritation.

H315: Causes skin irritation.

**Precautionary statements** 

: P102: Keep out of reach of children. General

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

: P280: Wear protective gloves, protective clothing, eye protection, face protection. Prevention

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

 Response : P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel

unwell.

P332+P313: If skin irritation occurs: Get medical advice.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P363: Wash contaminated clothing before reuse.

 Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

**Contains** : Guanidinium chloride

2.3. Other hazards

: The substance does not fulfil the criteria to be identified as PBT substance or vPvB Other hazards

substance according to Annex XIII of Regulation REACH.



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### 3. Composition/information on ingredients

Substance / Preparation : Guanidinium chloride

EC No :200-002-3 Annex No :607-148-00-0

Substance.

Substance name
Guanidinium chloride

Contents

CAS No 50-01-1 EC No 200-002-3 Annex No 607-148-00-0 REACH Ref.

Classification Xn; R22 Xi; R36/38

Acute Tox. 4 (oral) \_ H302 Eye irrit 2 \_ H319 Skin Irrit. 2 \_ H315

Contains no other components or impurities which will influence the classification of the product.

### 4. First aid measures

#### 4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest.

Skin contact : Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation occurs : Get medical advice. Specific treatment (see on this label)

skin irritation occurs : Get medical advice. Specific treatment (see on this label).

**Eye contact** : Get medical advice. Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists :

Ingestion : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth. Call a

POISON CENTER or doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Swallowing a small quantity of this material will result in serious health hazard.

Causes serious eye irritation.

Causes skin irritation.

## 4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

### 5. Fire-fighting measures

## 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media**: Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

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



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## 5. Fire-fighting measures (continued)

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

### 6. Accidental release measures

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

**For emergency responders** : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

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

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Store away from other materials. Collect spillage.

## 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

### 7. Handling and storage

### 7.1. Precautions for safe handling

**Handling** : Do not eat, drink or smoke when using this product. Wash thoroughly after

handling. Wash thoroughly after handling.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

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

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

closed when not in use.



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## 7. Handling and storage (continued)

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

### 8. Exposure controls/personal protection

#### 8.1. Exposure controls

**Personal protection** : Avoid all unnecessary exposure.

Respiratory protection
 Hand protection
 Wear approved mask.
 Wear protective gloves.

Skin protection
 Eye protection
 Chemical goggles or safety glasses.
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

## 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

Colour: White powderOdour: Odorless

Odour threshold : No data available.
pH value : No data available.
Melting point [°C] : 185 - 189 °C

: N/A **Decomposition point [°C]** : N/A Critical temperature [°C] Auto-ignition temperature [°C] : N/A : N/A Flammability (solid, gas) : N/A Flash point [°C] **Boiling point [°C]** : N/A Initial boiling point [°C] : N/A Final boiling point [°C] : N/A **Evaporation rate** : N/A



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### 9. Physical and chemical properties (continued)

Vapour pressure [20°C] : N/A
Vapour pressure mm/Hg : N/A
Vapour density : N/A

**Density [g/cm3]** : 1.345 g/cm3 at 20 °C

Relative density, gas (air=1) : N/A Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : 573 g/l at 20 °C - c

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : 4.5 - 6.0 at 573 g/l

Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

## 10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products



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## **GUANIDINE HYDROCHLORIDE (FOR BIOCHEMISTRY)**

## 10. Stability and reactivity (continued)

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

## 11. Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity** 

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

• Ingestion : Harmful if swallowed.

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

**Irritation** : Causes serious eye irritation.

Causes skin irritation.

Sensitization: Based on available data, the classification criteria are not met.Mutagenicity: Based on available data, the classification criteria are not met.Carcinogenicity: Based on available data, the classification criteria are not met.Toxic for reproduction: Based on available data, the classification criteria are not met.STOT-single exposure: Based on available data, the classification criteria are not met.STOT-repeated exposure: Based on available data, the classification criteria are not met.Aspiration hazard: Based on available data, the classification criteria are not met.

### 12. Ecological information

## 12.1. Toxicity

**Toxicity information** : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

### 12.5. Results of PBT and vPvB assessment



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## **GUANIDINE HYDROCHLORIDE (FOR BIOCHEMISTRY)**

### 12. Ecological information (continued)

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

### 13. Disposal considerations

#### 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 14. Transport information

### 14.1. Land transport (ADR-RID)

**General information** : Not regulated.

#### 14.2. Sea transport (IMDG) [English only]

**General information** : Not regulated.

### 14.3. Air transport (ICAO-IATA) [English only]

General information : Not regulated.

### 15. Regulatory information

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

Safety, health and environmental regulations/legislation specific for the

: Ensure all national/local regulations are observed.

substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions. : The components of this product are not subject to authorization.

### 15.2. Chemical Safety Assessment



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## **GUANIDINE HYDROCHLORIDE (FOR BIOCHEMISTRY)**

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

## **DISCLAIMER:**

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

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