



SAFETY DATA SHEET

Revision Date **30-Apr-2012**

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name GUANIDINE HYDROCHLORIDE ULTRA PURE

Recommended Use For research use only
Registration Number No information available

1.1 Product Identifier

Catalog Number: 105696

Supplier: MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency Telephone Number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

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

2. HAZARDS IDENTIFICATION

GHS - Classification

| | |
|--|----------------------------|
| Aspiration Toxicity | Not classified |
| Acute Oral Toxicity | Not classified |
| Acute Dermal Toxicity | Category 4 |
| Acute Inhalation Toxicity - Gas | Not classified |
| Acute Inhalation Toxicity - Vapors | Not classified |
| Acute Inhalation Toxicity - Dusts and Mists | Not classified |
| Skin Corrosion/Irritation | Not classified |
| Serious Eye Damage/Eye Irritation | Not classified |
| Respiratory Sensitization | Not classified |
| Skin Sensitization | Not classified |
| Germ Cell Mutagenicity | Not classified |
| Carcinogenicity | Not classified |
| Reproductive Toxicity | Not classified |
| Specific Target Organ Toxicity (Single Exposure) | Not classified |
| Specific Target Organ Toxicity (Repeated Exposure) | Not classified |
| Acute Aquatic Toxicity | Not classified for acute |
| Chronic Aquatic Toxicity | Not classified for chronic |
| Ozone | Not applicable |

GHS Label elements, including precautionary statements

Physical Hazards None

Risk Code

R22 - Harmful if swallowed.

Risk Combination Phrases

R36/38 - Irritating to eyes and skin.



Signal Word

Warning

Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P322 - Specific measures (see .? on this label)
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/container to an approved waste disposal plant

NFPA rating:

| | |
|---------------------------|---|
| NFPA Health: | 2 |
| NFPA Flammability: | 0 |
| NFPA Reactivity: | 0 |
| NFPA Special Note: | - |

Precautionary Statements

Prevention

Wear protective gloves/protective clothing/eye protection/face protection.

General advice

Specific measures (see supplemental first aid instructions on this label).

Skin

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Disposal

Dispose of contents of container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| | |
|--------------------------|-------------------------------------|
| Synonyms: | Not Available |
| Formula: | CH ₅ N ₃ •CIH |
| Molecular weight: | 95.5 |

For the full text of the R phrases and H statements mentioned in this section, see Section 2

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General Advice

Immediate medical attention is not required. Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediate medical attention is not required Rinse thoroughly with plenty of water, also under the eyelids.

| | |
|--|--|
| Skin Contact | If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with plenty of water. |
| Inhalation | Immediate medical attention is not required Move to fresh air. |
| Rinse mouth | Immediate medical attention is not required. Drink plenty of water. If symptoms persist, call a physician. |
| Protection of First-aiders | Use personal protective equipment. |
| <u>4.2 Most important symptoms and effects, both acute and delayed</u> | |
| Main Symptoms | No information available |
| <u>4.3 Indication of any immediate medical attention and special treatment needed</u> | |
| Notes to Physician | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Water. Foam.

Standard procedure for chemical fires

Extinguishing media which must not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

No information available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

See Section 12 for additional information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

6.4 Reference to other sections

See Section 12 for additional information

7. HANDLING AND STORAGE

Storage

ROOM TEMPERATURE

7.1 Precautions for safe handling

Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place
Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

7.3 Specific end uses

Exposure Scenario

No information available

Other Guidelines

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

| | |
|---|---|
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Derived No Effect Level (DNEL) | No information available |
| Predicted No Effect Concentration (PNEC) | No information available |

8.2 Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas..

Personal Protective Equipment

| | |
|---------------------------------|--------------------------------|
| Eye Protection | Tightly fitting safety goggles |
| Skin and Body Protection | Long sleeved clothing |
| Hand Protection | Protective gloves |
| Respiratory Protection | Effective dust mask.. |

Environmental Exposure Controls Do not allow material to contaminate ground water system..

Hygiene Measures General industrial hygiene practice..

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical State Powder.

Physical Property Data

| | |
|---------------------------------|---------------------------|
| pH Value | 5.4 |
| Flash Point | No information available |
| Autoignition Temperature | No data available |
| Melting/Freezing Point | 184°C |
| Boiling Point (°C) | No information available. |
| Vapor Pressure | No data available |
| Vapor Density | No information available |

| | |
|-----------------------------------|---------------------------------------|
| Water Solubility | 2150 g/L AT 20°C |
| Evaporation Rate | No data available. |
| Flammability (solid, gas) | No data available |
| Flammability Limits in Air | |
| upper flammability limit | No data available |
| lower flammability limit | No data available |
| Density | 1.344-1.354 g/cm ³ at 20°C |
| Specific Gravity | No data available. |
| Decomposition Temperature | No data available |
| Viscosity, Kinematic | No data available. |
| Viscosity, Dynamic | No data available. |
| Explosive Properties | No information available. |
| Oxidizing Properties | No information available |
| VOC Content (%) | No information available |
| Density VALUE | 1.344-1.354 g/cm ³ at 20°C |

9.2 Other Safety Information

Other Safety Information

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3

Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

None in particular

10.5 Incompatible Materials

None in particular

10.6 Hazardous Decomposition Products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| | |
|------------------------|--|
| Acute Toxicity | Product does not present an acute toxicity hazard based on known or supplied information |
| Inhalation | No information available. |
| Eye Irritation | Irritating to eyes. Risk of serious damage to eyes. May cause eye irritation with susceptible persons. |
| Skin Irritation | Irritating to skin. |
| Ingestion | Harmful if swallowed. |
| Acute toxicity | 0% of the mixture consists of ingredient(s) of unknown toxicity |

| | |
|-------------------------------|---|
| Mutagenic Effects | Contains no ingredient listed as a mutagen. |
| Carcinogenic Effects | None known. |
| Reproductive Toxicity | None known |
| Developmental Toxicity | None known. |
| Aspiration hazard | None known |

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

12.2 Persistence and degradability

No data is available on the product itself

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Clean container with water Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

IMDG/IMO Not regulated

ICAO Not regulated

ICAO/IATA Not regulated

14. TRANSPORT INFORMATION

| | |
|------------|---------------|
| <u>DOT</u> | Not regulated |
| <u>TDG</u> | Not regulated |
| <u>MEX</u> | Not regulated |

15. REGULATORY INFORMATION

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances / EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippine Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

16. OTHER INFORMATION

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Material Safety Data Sheet

Key literature references and sources for data

www.ChemADVISOR.com/