



Material Safety Data Sheet

Catalog Number: 101905
Revision date: 26-Apr-2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 101905

Product name: GUANIDINE HYDROCHLORIDE PRACTICAL GRADE

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)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
GUANIDINE HYDROCHLORIDE	50-01-1	90 - 100%	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful by inhalation, in contact with skin and if swallowed.

Category of Danger:

Harmful , Lachrymator

Principle routes of exposure: Skin

Inhalation: Harmful by inhalation.

Ingestion: Harmful if swallowed.

Skin contact: Harmful in contact with skin.

Eye contact: Risk of serious damage to eyes

Vapors extremely irritating to eyes an respiratory tract

ANSI Classification Irritant - eye, severe

Statements of hazard HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

CAUSES EYE IRRITATION.

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

Statement of First Aid If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician. In case of contact, flush eyes with running water for at least 15 minutes. Consult a physician for irritation or any other symptom.

Precautions - ANSI Label Do not taste or swallow. Wash thoroughly after handling. Avoid breathing vapors. Avoid contact with skin, eyes and clothing

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician Drink 1 or 2 glasses of water. Induce vomiting, but only if victim is fully conscious. Obtain medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO₂, water spray or "alcohol" foam

Specific hazards:

Burning produces irritant fumes.

Unusual hazards:

None known

Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific methods:

Water mist may be used to cool closed containers.

Flash point:

Not determined

Autoignition temperature:

Not determined

NFPA rating:

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment.

Environmental precautions:

Prevent product from entering drains.

Methods for cleaning up:

Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Storage:

ROOM TEMPERATURE
DESICCATE

Handling:

Use only in area provided with appropriate exhaust ventilation.

Safe handling advice:

Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

Technical measures/storage conditions:

Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and well-ventilated place.

Incompatible products:

Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

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Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Formula:	CH ₅ N ₃ •ClH
Molecular weight:	95.5
Melting point/range:	184 °C
Boiling point/range:	No Data available at this time.
Density:	1.345 g/cm ³ at 20 °C
Vapor pressure:	No data available
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	Soluble
Flash point:	Not determined
Autoignition temperature:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Chloride/Hydrochloric acid , Nitrogen oxides (NO _x)/ammonia/CN-
Materials to avoid:	Strong oxidising agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components

GUANIDINE HYDROCHLORIDE

RTECS Number:

MF4300000

Selected LD50s and LC50s

Oral LD50 Rat : 475 mg/kg

Oral LD50 Mouse : 571 mg/kg

Chronic toxicity:	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
Local effects:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Specific effects:	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
Primary irritation:	No data is available on the product itself.
Carcinogenic effects:	No data is available on the product itself.
Mutagenic effects:	No data is available on the product itself.
Reproductive toxicity:	No data is available on the product itself.

12. ECOLOGICAL INFORMATION

Mobility:	No data available
Bioaccumulation:	No data available

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**Ecotoxicity effects:
Aquatic toxicity:**

No data available
May cause long-term adverse effects in the aquatic environment.

Components	U.S. DOT - Appendix B - Marine Pollutan	U.S. DOT - Appendix B - Severe Marine Pollutants	United Kingdom - The Red List:
GUANIDINE HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	Germany VCI (WGK)	World Health Organization (WHO) - Drinking Water	Ecotoxicity - Fish Species Data
GUANIDINE HYDROCHLORIDE	1	Not Listed	Not Listed
Components	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Microtox Data	Ecotoxicity - Water Flea Data
GUANIDINE HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	EPA - ATSDR Priority List	EPA - HPV Challenge Program Chemical List	California - Priority Toxic Pollutants
GUANIDINE HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	California - Priority Toxic Pollutants	California - Priority Toxic Pollutants	
GUANIDINE HYDROCHLORIDE	Not Listed	Not Listed	

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging:

Do not re-use empty containers

14. TRANSPORT INFORMATION

UN/Id No: Not regulated

DOT:
Proper shipping name: Not Regulated

Components	U.S. DOT - Appendix A Table 1 - Reportable Quantities
GUANIDINE HYDROCHLORIDE	Not Listed

TDG (Canada):

WHMIS hazard class: D1b toxic materials
D2b toxic materials



IMDG/IMO

IMDG - Hazard Classifications

Not Applicable

Components	U.S. DOT - Appendix B - Marine Pollutant	U.S. DOT - Appendix B - Severe Marine Pollutants
GUANIDINE HYDROCHLORIDE	Not Listed	Not Listed

IMO-labels:

15. REGULATORY INFORMATION

International Inventories

Components

GUANIDINE HYDROCHLORIDE

Inventory - United States TSCA - Sect. 8(b)	Present
Canada DSL Inventory List -	Present
Australia (AICS):	Present
Inventory - China:	Present
EU EINECS List -	200-002-3; CH5N3.CIH
Inventory - Japan:	1-215
Korean KECL:	KE-18111
Philippines PICCS:	Present

U.S. regulations:

Components

GUANIDINE HYDROCHLORIDE

California Proposition 65	Massachusetts Right to Know List:	New Jersey Right to Know List:	Pennsylvania Right to Know List:
- Not Listed	Not Listed	Not Listed	Not Listed

Components

GUANIDINE HYDROCHLORIDE

Florida substance List:	Rhode Island Right to Know List:	Illinois - Toxic Air Contaminants	Connecticut - Hazardous Air Pollutants
Not Listed	Not Listed	Not Listed	Not Listed

Components

GUANIDINE HYDROCHLORIDE

SARA 313 Emission reporting/Toxic Release of Chemicals	CERCLA/SARA - Section 302 Extremely Haz	NTP:	IARC:
Not Listed	Not Listed	None	None

SARA 313 Notification:

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

Prepared by: Health & Safety

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End of Safety Data Sheet