

## GUANIDINE HYDROCHLORIDE

### SECTION 1: PRODUCT IDENTIFICATION

Product Name: Guanidine hydrochloride  
Product Code: CM 23,486  
CAS#: 50-01-1  
Synonym: Aminomethanamidinehydrochloride  
Chemical Name: Not available.  
Chemical Formula:  $\text{CH}_5\text{N}_3\text{HCl}$   
Formula Weight: 95.53

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Guanidine hydrochloride  
Toxicological Data on Ingredients: Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H332, H315, H319

### SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Skin irritation (Category 2), H315  
Eye irritation (Category 2), H319  
Potential Acute Health Effects:  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 4), H332  
Potential Chronic Health Effects: Not available.  
Carcinogenic Effects: Not available.  
Mutagenic Effects: Not available.  
Teratogenic Effects: Not available.  
Developmental Toxicity: Not available.

### SECTION 4: FIRSTAID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.  
Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.  
Serious Skin Contact: Not available.  
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.  
Serious Inhalation: Not Available.  
Ingestion: Do Not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.  
Serious Ingestion: Not available.

### SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media



Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder  
Special hazards arising from the substance or mixture  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sulfur oxides  
Hydrogen chloride gas  
Combustible.  
Development of hazardous combustion gases or vapours possible in the event of fire.  
Advice for firefighters  
In the event of fire, wear self-contained breathing apparatus.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
Environmental precautions  
Do not let product enter drains.  
Methods and materials for containment and cleaning up  
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions  
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### SECTION 7: HANDLING AND STORAGE

Precautions for safe handling  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Storage conditions:  
Tightly closed. Dry.  
Storage class:  
Storage class (TRGS 510): 11: Combustible Solids

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection  
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection  
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.  
Respiratory protection  
Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	:	White crystalline powder
Odor	:	Not available
Color	:	White
Molecular Weight	:	Not available
pH	:	Not available
Boiling Point	:	Not available



Melting Point	:	Not available
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not available
Vapor Density	:	Not available
Volatility	:	Not available
Odor Threshold	:	Not available
Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available

Conditions of Instability: Not available

Incompatibility with various substances: Strong oxidizing agents

Special Remarks on Corrosivity: Non-corrosive.

Special Remarks on Reactivity: Not available

Possibility of hazardous reactions: Not available

Hazardous decomposition products: In case of fire.

#### SECTION 11: TOXICOLOGICAL INFORMATION.

Acute Toxicity:

Acute toxicity, (Category 4) H302: Harmful if swallowed.

Acute toxicity, (Category 4) H332: Harmful if inhaled.

Skin irritation, (Category 2) H315: Causes skin irritation.

Eye irritation, (Category 2) H319: Causes serious eye irrita

Routes of Entry: No data available

Toxicity to Animals:

LD50: Oral - Rat - female - 773,6 mg/kg

LC50 Inhalation - Rat - female - 4 h - 3,181 mg/l - dust/mist

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: May cause respiratory irritation

Special Remarks on Toxicity to Animals: Not available

Special Remarks on other Toxic Effects on Humans: Not available

Potential Health : Liver - Irregularities - Based on Human Evidence

#### SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available

BOD and COD: Not available

Products of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not Available

#### SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.



SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class (es):

ADR/RID:

IMDG:

IATA:

Packaging group:

ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID: no

IMDG Marinepollutant:no

IATA: no

SECTION 15: REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements: Not available.

Other Special Considerations: Not available

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