# **Material Safety Data Sheet**

Version 4.1 Revision Date 10/26/2010 Print Date 01/11/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Muscimol

Product Number : M1523 Brand : Sigma

Product Use : For laboratory research purposes.

Supplier : Sigma-Aldrich Canada, Ltd Manufacturer : Sigma-Aldrich Corporation

2149 Winston Park Drive 3050 Spruce St.

OAKVILLE ON L6H 6J8 St. Louis, Missouri 63103

**USA** 

Telephone : +19058299500 Fax : +19058299292

Emergency Phone # (For

both supplier and manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

**CANADA** 

: 1-800-424-9300

### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

# **Target Organs**

Central nervous system

# **WHMIS Classification**

D1A Very Toxic Material Causing Immediate and Highly toxic by ingestion

Serious Toxic Effects

# **GHS Classification**

Acute toxicity, Oral (Category 2)

# GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H300 Fatal if swallowed.

Precautionary statement(s)

P264 Wash hands thoroughly after handling.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

**HMIS Classification** 

Health hazard: 3
Chronic Health Hazard: \*
Flammability: 0
Physical hazards: 0

### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

Sigma - M1523 Page 1 of 6

**Eyes** May cause eye irritation. **Ingestion** May be fatal if swallowed.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 3-Hydroxy-5-aminomethyl-isoxazole

5-Aminomethyl-3-isoxazolol

5-Aminomethyl-3-hydroxy-isoxazole

Formula :  $C_4H_6N_2O_2$ Molecular Weight : 114.1 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
5-(Aminomethyl)isoxazol-3-ol hydrate			
2763-96-4	220-430-4	-	-

### 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

# In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

# Conditions of flammability

Not flammable or combustible.

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

# Explosion data - sensitivity to mechanical impact

no data available

### Explosion data - sensitivity to static discharge

no data available

### **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Sigma - M1523 Page 2 of 6

#### 7. HANDLING AND STORAGE

# Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Conditions for safe storage

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

Recommended storage temperature: 2 - 8 °C

Keep in a dry place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# **Hand 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

# Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Appearance**

Form powder Colour white

# Safety data

pH no data available

Melting/freezing no data available

point

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Autoignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available

Sigma - M1523 Page 3 of 6

Vapour pressure no data available
Density no data available
Water solubility no data available
Partition coefficient: no data available

n-octanol/water

Relative vapour

density

no data available

Odour no data available
Odour Threshold no data available
Evaporation rate no data available

### 10. STABILITY AND REACTIVITY

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents, Strong acids, Acid chlorides, Acid anhydrides

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 45 mg/kg

#### Inhalation LC50

no data available

#### **Dermal LD50**

no data available

# Other information on acute toxicity

no data available

#### Skin corrosion/irritation

no data available

# Serious eye damage/eye irritation

no data available

# Respiratory or skin sensitization

no data available

# Germ cell mutagenicity

no data available

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

### Reproductive toxicity

Sigma - M1523 Page 4 of 6

no data available

### **Teratogenicity**

no data available

# Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

# Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

### **Aspiration hazard**

no data available

# Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be fatal if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

### Signs and Symptoms of Exposure

Central nervous system depression, May cause convulsions., Symptoms may be delayed., Neurotoxic effects., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# Synergistic effects

no data available

# **Additional Information**

RTECS: NY3325000

# 12. ECOLOGICAL INFORMATION

#### **Toxicity**

no data available

# Persistence and degradability

no data available

# **Bioaccumulative potential**

no data available

### Mobility in soil

no data available

# PBT and vPvB assessment

no data available

### Other adverse effects

no data available

# 13. DISPOSAL CONSIDERATIONS

# **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

# Contaminated packaging

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

DOT (US)

UN-Number: 1544 Class: 6.1 Packing group: II

Sigma - M1523 Page 5 of 6

Proper shipping name: Alkaloids, solid, n.o.s. (5-(Aminomethyl)isoxazol-3-ol hydrate)

Reportable Quantity (RQ): 1000 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 1544 Class: 6.1 Packing group: II EMS-No: F-A, S-A Proper shipping name: ALKALOIDS, SOLID, N.O.S. (5-(Aminomethyl)isoxazol-3-ol hydrate)

Marine pollutant: No

**IATA** 

UN-Number: 1544 Class: 6.1 Packing group: II

Proper shipping name: Alkaloids, solid, n.o.s. (5-(Aminomethyl)isoxazol-3-ol hydrate)

#### 15. REGULATORY INFORMATION

#### **DSL Status**

This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.

CAS-No. 2763-96-4

5-(Aminomethyl)isoxazol-3-ol hydrate

# WHMIS Classification

D1A Very Toxic Material Causing Immediate and Highly toxic by ingestion Serious Toxic Effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### 16. OTHER INFORMATION

#### **Further information**

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Sigma - M1523 Page 6 of 6