



**SIGMA-ALDRICH**

## Material Safety Data Sheet

Date Printed: 07/13/2004  
Date Updated: 04/06/2004  
Version 1.40

### Section 1 - Product and Company Information

**Product Name** Muscimol  
**Product Number** M1523  
**Brand** Sigma Chemical

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 314 771 5765  
**Fax:** 800 325 5052      **Emergency Phone:** 414 273 3850 Ext. 5996

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
MUSCIMOL	2763-96-4	Yes	220-430-4	

**Formula** C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>  
**Synonyms** Agarin, 5-Aminomethyl-3-hydroxyisoxazole, 5-(Aminomethyl)-3-isoxazolol, 5-(Aminomethyl)-3(2H)-isoxazolone, 5-Aminomethyl-3-isoxazole, 3-Hydroxy-5-aminomethylisoxazole, 3-Hydroxy-5-aminomethylisoxazole-agarin, Muscimol, Pantherin, RCRA waste number P007

### Section 3 - Hazards Identification

#### Emergency Overview

Highly Toxic (USA) Very Toxic (EU).  
Toxic if swallowed.  
Target organ(s): Central nervous system.

**HMIS Rating**  
Health: 3\*      Flammability: 0      Reactivity: 0

**NFPA Rating**  
Health: 3      Flammability: 0      Reactivity: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5 - Fire Fighting Measures

**Autoignition Temp:** N/A

#### Extinguishing Media

**Suitable**  
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure to be Followed in Case of Leak or Spill

Evacuate area.

#### Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep tightly closed. Store at 2-8°C

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Safety shower and eye bath. Use only in a chemical fume hood.

#### Personal Protective Equipment

##### Respiratory

Government approved respirator.

##### Hand

Compatible chemical-resistant gloves.

##### Eye

Chemical safety goggles.

**General Hygiene Measures**

Wash contaminated clothing before reuse. Wash thoroughly after handling.

**Section 9 - Physical/Chemical Properties**

Appearance	Color	Form
Physical State	White	Powder

Molecular Weight: 114.1 AMU

pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A

Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

**Section 10 - Stability and Reactivity****Stability****Materials to Avoid**

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

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide, Nitrogen oxides.

**Hazardous Polymerization****Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information****Route of Exposure****Skin Contact**

May cause skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

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**Eye Contact**

May cause eye irritation.

**Inhalation**

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

**Ingestion**

Toxic if swallowed.

**Target Organ(s) or System(s)**

Central nervous system.

**Signs and Symptoms of Exposure**

Can cause CNS depression. May cause convulsions. Symptoms may be delayed. Exposure can cause: Neurotoxic effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: NY3325000

**Toxicity Data**

Oral - Rat: 45 mg/kg (LD50)

Intravenous - Rat: 4500 UG/KG (LD50)

Oral - Mouse: 22 mg/kg (LD50)

Intraperitoneal - Mouse: 2500 UG/KG (LD50)

Remarks: Behavioral:Change in motor activity (specific assay).

Behavioral:Ataxia.

Lungs, Thorax, or Respiration:Dyspnea.

Subcutaneous - Mouse: 3800 UG/KG (LD50)

Remarks: Behavioral:Change in motor activity (specific assay).

Behavioral:Ataxia.

Lungs, Thorax, or Respiration:Dyspnea.

Intravenous - Mouse: 5620 UG/KG (LD50)

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations****Appropriate Method of Disposal of Substance or Preparation**

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.

Observe all federal, state, and local environmental regulations.

**Section 14 - Transport Information****DOT**

Proper Shipping Name: Alkaloids, solid, n.o.s. [or] Alkaloid salts, solid, n.o.s. [poisonous]

UN#: 1544

Class: 6.1

Packing Group: Packing Group II

Hazard Label: Toxic substances.

PIH: Not PIH

**IATA**

Proper Shipping Name: Alkaloids, solid, n.o.s.

IATA UN Number: 1544

Hazard Class: 6.1

Packing Group: II

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## Section 15 - Regulatory Information

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### EU Additional Classification

**Symbol of Danger:** T

**Indication of Danger**

Toxic.

**Risk Statements** R: 25

Toxic if swallowed.

**Safety Statements** S: 22 36/37/39 45

Do not breathe dust. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### US Classification and Label Text

**Indication of Danger**

Highly Toxic (USA) Very Toxic (EU).

**Risk Statements**

Toxic if swallowed.

**Safety Statements**

Do not breathe dust. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Statements**

Target organ(s): Central nervous system.

### United States Regulatory Information

**SARA Listed:** Yes

**Notes:** This product is subject to SARA section 313 reporting requirements.

**TSCA Inventory Item:** Yes

### Canada Regulatory Information

**WHMIS Classification**

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

**DSL:** No

**NDSL:** Yes

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## Section 16 - Other Information

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### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.