## Material Safety Data Sheet

Date Printed: 14/FEB/2005
Date Updated: 12/MAR/2004
Version 1.2
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and  ${\tt NOHSC.}$ 

## 1 - Product and Company Information

Product Name Product Number	BRUCINE FREE BASE B0253
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765
Technical Phone # Fax	+61 2 9841 0555 +61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
			Index Number
BRUCINE	357-57-3	206-614-7	614-006-00-1

Formula C23H26N2O4 Molecular Weight 394.47 AMU

Synonyms

Brucina (Italian) \* (-)-Brucine \* Brucine
alkaloid \* 2,3-Dimethoxystrychnidin-10-one \*
Dimethoxy strychnine \* 2,3-Dimethoxy-strychnine
\* 10,11-Dimethystrychnine \* RCRA waste number
P018 \* Strychnidin-10-one, 2,3-dimethoxy- (9CI)

\* Strychnine, 2,3-dimethoxy-

## 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Very toxic by inhalation and if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4 - First Aid Measures

## AFTER INHALATION

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

# AFTER SKIN CONTACT

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

#### AFTER EYE CONTACT

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.

#### AFTER INGESTION

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

## 5 - Fire Fighting Measures

## EXTINGUISHING MEDIA

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

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

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

## 6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES 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.

### 7 - Handling and Storage

#### HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### **STORAGE**

Conditions of Storage: Keep tightly closed.

## 8 - Exposure Controls / Personal Protection

#### ENGINEERING CONTROLS

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

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator. Hand Protection: Compatible chemical-resistant gloves. Eye Protection: Chemical safety goggles.

### 9 - Physical and Chemical Properties

Physical State: Solid Appearance

> Color: White Form: Powder

Value At Temperature or Pressure Property

```
N/A
рΗ
                        N/A
BP/BP Range
                        175 °C
MP/MP Range
Flash Point
                        N/A
Flammability
                        N/A
Autoignition Temp
                       N/A
Oxidizing Properties
Explosive Properties
                       N/A
                        N/A
Explosion Limits
                        N/A
Vapor Pressure
                        N/A
SG/Density
                        N/A
Partition Coefficient N/A
Viscosity
                        N/A
Vapor Density
                        N/A
Saturated Vapor Conc. N/A
Evaporation Rate
                        N/A
Bulk Density
                        N/A
Decomposition Temp.
                        N/A
Solvent Content
                       N/A
                        < 0.5 %
Water Content
Surface Tension
                       N/A
Conductivity
                        N/A
Miscellaneous Data
                       N/A
Solubility
                        N/A
10 - Stability and Reactivity
STABILITY
   Stable: Stable.
   Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,
   Nitrogen oxides.
HAZARDOUS POLYMERIZATION
   Hazardous Polymerization: Will not occur
11 - Toxicological Information
RTECS NUMBER: EH8925000
ACUTE TOXICITY
   LD50
   Intraperitoneal
   Rat
   91 MG/KG
   Remarks: Behavioral: Somnolence (general depressed activity).
   Behavioral: Rigidity (includes catalepsy). Behavioral: Muscle
   contraction or spasticity.
   LD50
   Oral
   Mouse
   150 \text{ mg/kg}
   Remarks: Behavioral: Convulsions or effect on seizure threshold.
   LD50
```

Mouse

Intraperitoneal

Remarks: Behavioral: Convulsions or effect on seizure threshold. LD50 Subcutaneous Mouse 60 MG/KG Remarks: Behavioral: Convulsions or effect on seizure threshold. T<sub>1</sub>D50 Intravenous Mouse 12 MG/KG Remarks: Behavioral: Convulsions or effect on seizure threshold. SIGNS AND SYMPTOMS OF EXPOSURE Exposure can cause: Convulsions. ROUTE OF EXPOSURE Skin Contact: Causes skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: Causes eye irritation. Inhalation: May be fatal if inhaled. Material is irritating to mucous membranes and upper respiratory tract. Ingestion: May be fatal if swallowed. TARGET ORGAN INFORMATION Central nervous system.

# 12 - Ecological Information

No data available.

## 13 - Disposal Considerations

#### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

```
RID/ADR
   UN#: 1570
   Class: 6.1
   Proper Shipping Name: Brucine
IMDG
   UN#: 1570
   Class: 6.1
   PG: I
   Proper Shipping Name: Brucine
   Marine Pollutant: No
   Severe Marine Pollutant: No
IATA
   UN#: 1570
   Class: 6.1
   PG: I
   Proper Shipping Name: Brucine
   Inhalation Packing Group I: No
```

## 15 - Regulatory Information

## CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

ANNEX I INDEX NUMBER: 614-006-00-1

INDICATION OF DANGER: T+

Very toxic.

R-PHRASES: 26/28 52/53

Very toxic by inhalation and if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-PHRASES: 13 45 61

Keep away from food, drink, and animal feedingstuffs. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions/safety data sheets.

#### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 3

#### SWITZERLAND

SWISS POISON CLASS: 2

#### 16 - Other Information

#### 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 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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