# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.0 Revision Date 01/01/2009 Print Date 06/04/2009

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name Strychnine

Product Number 85920 Brand Fluka

Company : Sigma-Aldrich Canada, Ltd

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**CANADA** 

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C21H22N2O2 Molecular Weight : 334.42 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Strychnine			
57-24-9	200-319-7	614-003-00-5	-

#### 3. HAZARDS IDENTIFICATION

# **Emergency Overview**

**Target Organs** 

Central nervous system

WHMIS Classification

Very Toxic Material Causing Immediate and D1A

Highly toxic by ingestion

Serious Toxic Effects Highly toxic by skin absorption

**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 cause skin irritation. May be fatal if absorbed through skin.

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

## 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

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

## 5. FIRE-FIGHTING MEASURES

## Flammable properties

Flash point no data available Ignition temperature no data available

## 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.

## **6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

## **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### Methods for cleaning up

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

## 7. HANDLING AND STORAGE

#### Handling

Avoid formation of dust and aerosols.

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

#### Storage

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

Keep in a dry place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Strychnine	57-24-9	TWA	0.15 mg/m3	2004-04-30	Canada. Occupational

			Health and Safety Code 218
TWA	0.15 mg/m3	2004-08-01	Canada. Worker's Compensation Act, Occupational Health and Safety Regulations (BC Reg 296/97 as amended), 7.2 [B.C. Reg. 382/2004, s.1]
TWA	0.15 mg/m3	2005-02-03	Canada. Occupational Health and Safety Act [R.S.O. 1990, c.1], Industrial Establishments (R.R.O. 1990, Reg 851),139
TWA	0.15 mg/m3	2000-01-12	Canada. Act Respecting Occupational Health and Safety [R.S.Q., c.2.1], Regulation respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130- 14

# Personal protective equipment

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (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.

## Eye protection

Safety glasses

# Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

# Hygiene measures

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

# **Appearance**

Form powder
Colour light yellow

Safety data

pH no data available

Melting point 284 - 286 °C (543 - 547 °F)

Boiling point no data available

Flash point no data available
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

## 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

## Materials to avoid

Strong oxidizing agents

# **Hazardous decomposition products**

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

#### 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

LD50 Oral - rat - 2.35 mg/kg

#### Irritation and corrosion

no data available

### Sensitisation

no data available

## Chronic exposure

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.

Reproductive toxicity - rat - Intramuscular

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Newborn: Stillbirth.

# Signs and Symptoms of Exposure

CNS stimulation., Convulsions

#### **Potential Health Effects**

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

Eyes May cause eye irritation.
Ingestion May be fatal if swallowed.
Target Organs Central nervous system,

# Additional Information RTECS: WL2275000

# 12. ECOLOGICAL INFORMATION

# Elimination information (persistence and degradability)

no data available

# **Ecotoxicity effects**

LC50 - Lepomis macrochirus - 0.76 mg/l - 96 h Toxicity to fish

## Further information on ecology

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

# 13. DISPOSAL CONSIDERATIONS

#### **Product**

Observe all federal, state, and local environmental regulations. 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: 1692 Class: 6.1 Packing group: I

Proper shipping name: Strychnine Marine pollutant: Marine pollutant Poison Inhalation Hazard: No

IMDG

UN-Number: 1692 Class: 6.1 Packing group: I EMS-No: F-A, S-A

Proper shipping name: STRYCHNINE Marine pollutant: Marine pollutant

**IATA** 

UN-Number: 1692 Class: 6.1 Packing group: I

Proper shipping name: Strychnine

IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

## **DSL Status**

All components of this product are on the Canadian DSL list.

# WHMIS Classification

Very Toxic Material Causing Immediate and D1A Highly toxic by ingestion

Serious Toxic Effects Highly toxic by skin absorption

# 16. OTHER INFORMATION

#### **Further information**

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