Material Safety Data Sheet
L-Strychnine, 98\%

MSDS\# 86171

## Section 1 - Chemical Product and Company Identification

MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:

Company Identification: (USA)

For information in the US, call:
For information in Europe, call:
Emergency Number, Europe:
Emergency Number US:
CHEMTREC Phone Number, US:
CHEMTREC Phone Number, Europe:

Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
800-ACROS-01
+32 14575211
+32 14575299
201-796-7100
800-424-9300
703-527-3887

Section 2 - Composition, Information on Ingredients

CAS\#:
Chemical Name:
\%:
EINECS\#:

57-24-9
Strychnine
98
200-319-7

Hazard Symbols:


Risk Phrases:


27/28 50/53
Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Danger! May cause central nervous system effects. May cause liver and kidney damage. Toxic if swallowed. Toxic if absorbed through the skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Target Organs: Kidneys, central nervous system, liver.
Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation. May be fatal if absorbed through the skin. Absorption into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).
May be fatal if swallowed. May cause irritation of the digestive tract. May cause liver and kidney damage. May
Ingestion: cause central nervous system effects and/or neurological effects. Effects may be delayed. May cause convulsions, increased blood pressure, muscle spasms, and possible paralysis.

Inhalation: Effects may be delayed. May cause respiratory tract irritation. May be harmful if inhaled. Inhalation may lead to hematemesis, convulsions, shock, coma, and possible death.

May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), acidosis, and quick, shallow breathing.

## Section 4 - First Aid Measures

Eyes:

Skin:

Ingestion:

Inhalation:

Notes to Physician:

General Information:

Extinguishing
Media:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Get medical aid immediately. Wash mouth out with water. If swallowed, do not induce vomiting unless
aid.

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY.

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved ated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.
Do NOT use straight streams of water. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use water spray, fog or regular foam. Cool containers with flooding quantities of water until well after fire is out.

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Autoignition Not available
Flash Point: \(270 \operatorname{deg} \mathrm{C}\) ( 518.00 deg F )
Explosion
Limits: Lower: \(\mathrm{N} / \mathrm{A}\)
Explosion N/A
Limits: Upper:
NFPA Rating: health: 4; flammability: 1 ; instability: 0 ;
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## Section 6 - Accidental Release Measures

General
Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Do not let this chemical enter the environment.

Section 7 - Handling and Storage
Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid Handling: contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use only in a chemical fume hood. Wash clothing before reuse.

Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Poison room locked.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Strychnine: $0.15 \mathrm{mg} / \mathrm{m} 3$ TWA
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use
adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.
Exposure Limits
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear butyl rubber gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties
Physical State: Crystalline powder
Color: white - fine
Odor: odorless
$\mathrm{pH}: 9.5$ (saturated)
Vapor Pressure: 0 mm Hg @ 20C
Vapor Density: 11.5
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 270 deg $\mathrm{C}\left(518.00^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: 284-286 deg C
Decomposition Temperature:
Solubility in water: Slightly soluble
Specific Gravity/Density: 1.36
Molecular Formula: C21H22N2O2
Molecular Weight: 334.41
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition
Products
Hazardous Polymerization

Stable at room temperature in closed containers under normal storage and handling conditions.
Incompatible materials, dust generation, excess heat, oxidizers.
Strong oxidizing agents, alkali hydroxides, bromides, carbonates, iodides.
Nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide, sulfur oxides (SOx), including sulfur oxide and sulfur dioxide.
Has not been reported.
Section 11 - Toxicological Information
RTECS\#: CAS\# 57-24-9: WL2275000
RTECS:
CAS\# 57-24-9: Oral, mouse: LD50 $=2 \mathrm{mg} / \mathrm{kg}$;
LD50/LC50: Oral, rat: LD50 = $2350 \mathrm{ug} / \mathrm{kg}$; Skin, rabbit: LD50 = >2000 mg/kg;

Carcinogenicity: Strychnine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated.
Section 12 - Ecological Information
Other: No information available.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT

Shipping Name: STRYCHNINE
Hazard Class: 6.1
UN Number: UN1692
Packing Group: I
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS\# 57-24-9: 10 lb final RQ; 4.54 kg final RQ
Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: T+N
Risk Phrases:
R 27/28 Very toxic in contact with skin and if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases:
S 13 Keep away from food, drink and animal feeding stuffs.
S 36/37 Wear suitable protective clothing and gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.
WGK (Water Danger/Protection)
CAS\# 57-24-9: Not available
Canada
CAS\# 57-24-9 is listed on Canada's DSL List
Canadian WHMIS Classifications: D1A
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 57-24-9 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 57-24-9 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 10/29/1998
Revision \#6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

