





# Material Safety Data Sheet Vidarabine MSDS

# **Section 1: Chemical Product and Company Identification**

Product Name: Vidarabine Catalog Codes: SLV1288

**CAS#**: 5536-17-4 **RTECS**: AU6200000

TSCA: TSCA 8(b) inventory: Vidarabine

CI#: Not available.

**Synonym:** 9-Arabinosyladenine; 9-beta-D-Arabinofuranosyladenine; 9H-Purin-6-amine, 9-beta-D-arabinofuranosyl-; Adenine arabinoside; Adenine beta-D-arabinofuranoside; Ara-A; Araadenosine;

Arabinosyladenine; beta-Ara-A; beta-D-Arabinosyladenine;

Spongoadenosine; Vidarabin

Chemical Name: Adenine, 9-beta-D-arabinofuranosyl

Chemical Formula: C10-H13-N5-O4

#### **Contact Information:**

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: **1-800-901-7247** 

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

# **Section 2: Composition and Information on Ingredients**

## **Composition:**

Name	CAS#	% by Weight
Vidarabine	5536-17-4	100

Toxicological Data on Ingredients: Vidarabine: ORAL (LD50): Acute: >5000 mg/kg [Rat]. 7.8 mg/kg [Mouse].

## **Section 3: Hazards Identification**

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

#### **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

## Section 4: First Aid Measures

## **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

#### Inhalation:

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

Serious Inhalation: Not available.

#### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

# **Section 5: Fire and Explosion Data**

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

#### Fire Hazards in Presence of Various Substances:

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

#### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

#### **Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards: Not available.

## **Section 6: Accidental Release Measures**

#### **Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

# **Section 7: Handling and Storage**

## **Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

#### Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Freeze product for long term storage. Do not store above 20°C (68°F). For short periods of time the material can be stored in the refrigerator at a temperature range of 2 to 6 deg. C.

# **Section 8: Exposure Controls/Personal Protection**

#### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

## Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

# Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 267.28 g/mole

Color: Not available.

pH (1% soln/water): Not available.

**Boiling Point:** Not available. **Melting Point:** 260°C (500°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available. Ionicity (in Water): Not available.

**Dispersion Properties:** Not available.

Solubility: Not available.

# Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 7.8 mg/kg [Mouse].

**Chronic Effects on Humans:** 

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: blood, liver,

central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

## Special Remarks on Chronic Effects on Humans:

May affect genetic material (mutagenic). May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.

#### **Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Causes eye irritation which is generally mild. It may cause lacrimation, burning pain, itching, photophobia, punctal occlusion ("tear drain" of eye is closed) Inhalation: May cause respiratory tract irritation. Ingestion: Causes gastrointestinal disturbances with hypermotility and diarrhea. It may also affect behavior/central nervous system (ataxia, psychosis, tremor, hallucinatons), liver. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect behavior/cental nervous system, liver, blood(changes in white blood cell count, platelet count, hemoglobin, hematocrit), and may cause weight loss. Medical conditions aggravated by exposure: Impaired liver and kidney function.

# **Section 12: Ecological Information**

Ecotoxicity: Not available.

BOD5 and COD: Not available.

#### **Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

# **Section 13: Disposal Considerations**

## **Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# **Section 14: Transport Information**

**DOT Classification:** Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

# **Section 15: Other Regulatory Information**

Federal and State Regulations: TSCA 8(b) inventory: Vidarabine

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

R63- Possible risk of harm to the unborn child. S36/37- Wear suitable protective clothing and gloves.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

**Personal Protection: E** 

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard:

#### **Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

## **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 12:14 AM

Last Updated: 06/09/2012 12:00 PM

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 ScienceLab.com 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 ScienceLab.com has been advised of the possibility of such damages.