# Safety Data Sheet

**Revision Date: 03/05/18**
www.restek.com
2 Letter ISO country code/language code: US/EN

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **Reserpine 1000 pg/ul; LCMS-8030 SN Stock** |
| **Company:** | Shimadzu Scientific Instruments |
| **Address:** | 7102 Riverwood Drive<br>Columbia, MD 21046 |
| **Phone#:** | 800-477-1227 |
| **Fax#:** | 410-381-1222 |
| **Emergency#:** | 1-800-424-9300 (CHEMTREC)<br>+1 703-741-5970 (Outside the US) |
| **Email:** | sds@restek.com |
| **Revision Number:** | 3 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**

**GHS Classification:**
Flammable Liquid Category 2
Serious Eye Damage/Eye Irritation Category 2
Acute Toxicity - Dermal Category 4
Acute Toxicity - Oral Category 4

**GHS Signal Word:**
Danger

**GHS Hazard:**
Highly flammable liquid and vapour.
Harmful if swallowed or in contact with skin.
Causes serious eye irritation.

**GHS Precautions:**

**Safety Precautions:**
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilation and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands and skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

**First Aid Measures:**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific measures see section 4.
Rinse mouth.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
In case of fire: Use extinguishing media in section 5 for extinction.

**Storage:**
Keep container tightly closed.
Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container according to section 13 of the SDS.

**Single Exposure Target Organs:** No data available

**Repeated Exposure Target Organs:** No data available

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| acetonitrile | 75-05-8 | 200-835-2 | 99 |
| Dichloromethane | 75-09-2 | 200-838-9 | 1 |
| reserpine | 50-55-5 | 200-047-9 | 0 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. Serious harm (damage) may result if treatment is delayed. Continue to flush eyes while awaiting medical attention

**Skin Contact:** Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

**Ingestion:** Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS. Never give anything by mouth to an unconscious person

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be severely irritating or highly toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a

minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Highly toxic or corrosive material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| acetonitrile | 75-05-8 | 500 ppm IDLH | None Known | 20 ppm TWA | 40 ppm TWA; 70 mg/m3 TWA |
| Dichloromethane | 75-09-2 | 2300 ppm IDLH | None Known | 50 ppm TWA | 25 ppm TWA; 125 ppm STEL (15 min. TWA) |

**Personal Protection:**

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Respiratory Protection:** Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

**Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Medical Conditions Aggravated By Exposure:** Liver disease

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available |
| **Odor:** | Mild |
| **Physical State:** | No data available |
| **pH:** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Vapor Density:** | 1.4 (air = 1) |
| **Boiling Point:** | 81.6 °C at 760 mmHg (HSDB) |
| **Melting Point:** | -43.82 °C |
| **Flash Point:** | 43 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 16 |
| **Lower Flammable/Explosive Limit, % in air:** | 4.4 |
| **Autoignition Temperature:** | No data available deg C |
| **Decomposition Temperature:** | No data available |
| **Specific Gravity:** | 0.7857 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available |
| **Odor Threshold:** | ND |
| **Solubility:** | Not determined |
| **Partition Coefficient: n-octanol in water:** | No data available |
| **VOC % by weight:** | 0 |
| **Molecular Weight:** | No data available |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | None known.Contamination High temperatures |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents Caustics (bases) |

**Hazardous Decomposition Products:** Carbon dioxide Carbon monoxide

## 11. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Inhalation Contact Absorption Ingestion
**Target Organs Potentially Affected By Exposure:** Liver, Cardiovascular System, Central nervous system stimulation, Respiratory Tract
**Chemical Interactions That Change Toxicity:** None Known

**Immediate (Acute) Health Effects by Route of Exposure:**

**Inhalation Irritation:** Causes respiratory tract irritation
**Inhalation Toxicity:** Harmful! Can cause systemic damage (see "Target Organs)Inhalation of high concentrations may result in central nervous system (CNS) effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.
**Skin Contact:** Causes skin irritation.
**Skin Absorption:** Harmful if absorbed through the skin.
**Eye Contact:** Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.Can cause irritation.
**Ingestion Irritation:** Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract.
**Ingestion Toxicity:** Harmful if swallowed. May cause systemic poisoning.

**Long-Term (Chronic) Health Effects:**

**Carcinogenicity:** Contains a probable or known human carcinogen.
**Reproductive and Developmental Toxicity:** No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
**Inhalation:** Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)
**Skin Absorption:** Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage

**Component Toxicological Data:**

**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Methane, dichloro- | 75-09-2 | Inhalation LC50 Rat 53 mg/L 6 h |
| Acetonitrile | 75-05-8 | Dermal LD50 Rabbit 390 mg/kg |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. | |
|---|---|---|
| Methylene chloride | 75-09-2 | 25 ppm TWA (8 hr.); 125 ppm STEL (15 min.); 12.5 ppm Action Level (see 29 CFR 1910.1051); effective date for respiratory protection for certain employers to acheive the 8-hour TWA PEL is August 31, 1998; the start up date to install engineering controls is December 10, 1998.; {OSHA - 29 CFR 1910 Specifically Regulate |

**ACGIH:**

| Chemical Name | CAS No. | |
|---|---|---|
| Dichloromethane | 75-09-2 | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| Acetonitrile | 75-05-8 | A4 - Not Classifiable as a Human Carcinogen |

**NIOSH:**

| Chemical Name | CAS No. | |
|---|---|---|
| Methylene chloride | 75-09-2 | potential occupational carcinogen |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| Monograph 110 [in preparation]; Monograph 71 [1999] | 75-09-2 | Group 2A |

## 12. ECOLOGICAL INFORMATION

**Overview:** Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
**Mobility:** No data
**Persistence:** No data
**Bioaccumulation:** No data
**Degradability:** No data
**Ecological Toxicity Data:** No data available

## 13. DISPOSAL CONSIDERATIONS

**Waste Description of Spent Product:** Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.
**Disposal Methods:** Dispose of by incineration following Federal, State, Local, or Provincial regulations.
**Waste Disposal of Packaging:** Comply with all Local, State, Federal, and Provincial Environmental Regulations.

## 14. TRANSPORTATION INFORMATION

**United States:**
**DOT Proper Shipping Name:** Flammable liquids, toxic, n.o.s. (Acetonitrile, Dichloromethane)
**UN Number:** UN1992
**Hazard Class:** 3(6.1)
**Packing Group:** II

**International:**
**IATA Proper Shipping Name:** Flammable liquids, toxic, n.o.s. (Acetonitrile, Dichloromethane)
**UN Number:** UN1992
**Hazard Class:** 3(6.1)
**Packing Group:** II

**Marine Pollutant:** No

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| acetonitrile | 75-05-8 | X | X | - | X |
| Dichloromethane | 75-09-2 | X | X | - | X |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Reserpine | 50-55-5 | Prop 65 Cancer |
| Dichloromethane | 75-09-2 | Prop 65 Cancer |
| Dichloromethane (Methylene chloride) | | |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| acetonitrile | 75-05-8 | X | X | X | X |
| Dichloromethane | 75-09-2 | X | X | X | X |
| reserpine | 50-55-5 | | | | |

## 16. OTHER INFORMATION

**Prior Version Date:** 03/05/18
**Other Information:** Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.
**References:** No data available
**Disclaimer:** IMPORTANT: WHILE THE DESCRIPTIONS, DATA AND INFORMATION

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