



## Section 1 - Chemical Product and Company Identification

**Product Name** Putrescine Dihydrochloride extrapure, 99%  
**Product Code** 81343  
**CAS No** 333-93-7  
**Company Name** Sisco Research Laboratories Pvt. Ltd.  
**Address** 608, B Wing, Satellite Gazebo, Andheri Ghatkopar Link Road,  
Andheri (E), Mumbai - 400 099, India

## Section 2 - Composition/Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
333-93-7	Putrescine Dihydrochloride	99	206-375-9

No components need to be disclosed according to the applicable regulations.

## Section 3 - Hazards Identification

### Risk advice to man and the environment

Not a hazardous substance or mixture

## Section 4 - First Aid Measures

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

**Skin:** Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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

**Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**Notes to Physician:**

## Section 5 - Fire Fighting Measures

### Extinguishing Media

**Suitable:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special Protective

**Equipment For Firefighters:** Wear self contained breathing apparatus for fire fighting if necessary.

## Section 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.

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

## Section 7 - Handling and Storage

**Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage:** 2 to 8°C (Refrigerate). Keep container tightly closed in a dry and well-ventilated place.

## Section 8 - Exposure Control / Personal Protection

### Personal Protective Equipment

**Respiratory Protection:** 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:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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.

## Section 9 - Physical and Chemical Properties

Physical State: Solid  
Molecular Formula:  $C_4H_{12}N_2 \cdot 2HCl$   
Molecular Weight: 161.08  
Melting point: 280°C (536°F)-dec

## Section 10 - Stability and Reactivity

**Storage stability:** Stable under recommended storage conditions.

**Materials to avoid:** Strong oxidizing agents

### Hazardous decomposition

### Products formed under fire

**conditions.** - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

## Section 11 - Toxicological Information

**Acute toxicity:** No data available



**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.

## Signs And Symptoms

**Of Exposure:** No data available

## Route Of Exposure

**Inhalation:** No data available

**Skin :** No data available

**Eyes:** No data available

**Ingestion:** No data available

## Section 12 - Ecological Information

No data available.

## Section 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.

## Section 14 - Transport Information

IATA	IMO	RID/ADR
<b>Shipping Name:</b>	<b>Not regulated for transport (Non-Haz)</b>	
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## Section 16 - Other Information

Sisco Research Laboratories Pvt. Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.