

## Material Safety Data Sheet.

### 1. IDENTIFICATION

**Product Identifier:** Pyridoxine Hydrochloride (Vitamin B6)  
**Other Means of Identification:** Chemical name: 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl-, hydrochloride  
**Synonyms:** Vitamin B6 hydrochloride; Pyridoxol hydrochloride

**Chemical Formula:** C8-H12-Cl-N-O3  
**Chemical Family:** Vitamins  
**CAS Number:** 58-56-0  
**Recommended Use:** Food Additive/Dietary Supplement  
**Restrictions on Use:** Information is not available.  
**Initial Supplier Identifier:** Gurvey & Berry Co. Inc.  
310 Judson Street, Unit #15  
Toronto, ON, Canada, M8Z 5T6  
Tel: (416) 259-5700 Fax: (416) 259-5417  
E-mail: [msds@gurveyberry.com](mailto:msds@gurveyberry.com)

**Emergency Telephone number:** Canutec +1 (613)-966-6666 - 24 hours

### 2. HAZARD IDENTIFICATION

GHS Classification in accordance with Hazardous Products Regulations (HPR) OR/2015-17)

Hazard class	Hazard class and category	Hazard statement
Serious eye damage/eye irritation	1	H318
Acute toxicity oral	5	H303
Hazardous to the Aquatic Environment - Short-Term (Acute) Hazard	2	H401



Pictograms:

Signal word:

**Danger!**

#### Hazard statements

H318 Causes serious eye damage.  
H303 May be harmful if swallowed  
H401 Toxic to aquatic life

**Precautionary statements – prevention.**

P280 Wear protective eye/face protection and gloves/clothing.  
 P273 Avoid release to the environment.

**Precautionary statements – response**

P305+P354+P338 IF IN EYES: Rinse immediately with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 P317 Get medical help.

P301 + P317+330 IF SWALLOWED: Rinse mouth. Get medical help

**Precautionary statements – disposal**

P501 Dispose of in accordance with local, regional, and federal authority requirement.

**Hazards not otherwise classified (HNOC) or not covered by GHS.**

Chronic oral exposure to excessive amounts may cause damage to nervous system and reproductive system.  
 Risk of dust explosion.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Concentration	Common name / Synonyms
Pyridoxine Hydrochloride	58-56-0	>= 98%	Vitamin B6 hydrochloride

**Notes:**

Molecular formula C8-H12-Cl-N-O3

**4. FIRST-AID MEASURES****First aid measures by route of exposure:****General:**

Avoid breathing dust  
 Wash hands, skin, and contaminated clothing thoroughly after handling.  
 Do not eat, drink, or smoke when using this product.  
 Use in a well-ventilated area.  
 Wear protective gloves/clothing and eye/face protection.

**After Inhalation:**

Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.

**After Eye Contact:**

Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 Do not allow victim to rub eyes. Keep eye wide open while rinsing.

Continue rinsing eyes during transport to hospital.

**After Skin Contact:** Wash with plenty of water.  
If skin irritation occurs: Get medical help.

**After Ingestion:** Rinse mouth. Give a glass of water to drink. Get medical help.  
Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

**Most Important Symptoms and Effects, Acute and Delayed:**

**Symptoms/effects after inhalation of dust:** Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

**Symptoms/effects after skin contact:** May cause skin irritation. Redness and pain.

**Symptoms/effects after eye contact:** Causes eye damage. Causes redness and pain, tearing, swelling.  
May cause irreversible tissue damage and blindness.

**Symptoms/effects after ingestion:** May cause abdominal pain, nausea, heartburn, lack of muscle control or coordination, numbness.

**Medical Conditions Aggravated By Exposure:** No data available.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**  
Use extinguishing media suitable for ABC class fires.

**Unsuitable Extinguishing Media:** Do not use water jet.

**Special Hazards Arising from the Product:**  
Specific hazards during fire-fighting: Formation of corrosive gases by combustion.

**Special Protective Equipment and Precautions for Fire-Fighters:**  
As in any fire, wear a self-contained breathing apparatus and full protective gear.  
During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Further information.** Consider dust exposure hazard.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment, and emergency procedures:**

Communicate hazard.

Evacuate unprotected personnel to safe areas.

Wear personal protective equipment. (see section 8).

Remove all sources of ignition.

Ensure adequate ventilation. Avoid breathing dust.

Prevent further spill if safe to do so.

Wash hands thoroughly with mild soap and water after handling this material.

### **Methods and materials for containment and cleaning up**

#### **Small spill**

Wear Personal protective equipment (see section 8).

Prevent further spillage if safe to do so.

Avoid generation of dusts. Use dust suppressant agent.

Sweep up and place into designated, labeled, closed waste containers for disposal.

Cover drains. May be taken up dry or spread some water on contaminated surface. Do not flush into surface water or sanitary sewer system.

Dispose of containers in accordance with local, regional, and federal authority requirement.

#### **Large spill.**

Assess if you can handle the spill.

Get advice from emergency services if necessary.

Wear Personal protective equipment (see section 8).

Prevent further spillage if safe to do so.

Avoid generation of dusts. Use dust suppressant agent.

If feasible, shovel into designated, labeled, closed waste containers for disposal.

Cover drains. May be taken up dry or spread some water on contaminated surface. Do not flush into surface water or sanitary sewer system.

Dispose of containers in accordance with local, regional, and federal authority requirement.

#### **Environmental precautions**

Do not let product enter drains.

Dispose of in accordance with local, regional, and federal authority requirement.

#### **Reference to other sections**

See section 1 for emergency contact.

See section 8 for information on appropriate personal protective equipment.

See section 13 for disposal.

## 7. HANDLING AND STORAGE

### **Precautions for Safe Handling:**

Always wear personal protective equipment (see section 8)

Avoid contact with eyes, skin, and clothing.

Avoid splashes and inhalation.

Use with adequate ventilation.

Take precautionary measures against static discharges.  
For precautionary statements see also section 2.2

Wash hands thoroughly after handling.  
Do not eat, drink, or smoke in the area.

**Conditions for Safe Storage:** Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Protect from heat and sunlight. Keep away from ignition sources.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
Pyridoxine Hydrochloride	N/A	N/A	N/A	N/A

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Vitamin B6 hydrochloride	Further manufacturing	Inhalation	Long-term systemic effects	1.9 mg/m <sup>3</sup>

**Appropriate Engineering Controls:** Local and/or general exhaust ventilation is required.  
Eyewash station and safety shower required.

### Personal Protection Measures (e.g. personal protective equipment):

**Eye/face protection** Safety glasses with side-shields or goggles for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN (EU).

**Skin and body protection** Full body protective clothing, required. Handle with gloves compatible with this material. Gloves must be inspected prior to use.

**Respiratory protection** Required when dust is generated. Use local ventilation or other appropriate engineering controls to keep exposure contaminants below the exposure limit.  
  
Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Have an effective respirator program in place according to government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure** Do not let product enter drains or ground.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form:	Solid powder
Color:	White or almost white
Molecular Weight:	205.64 g/mol
Odour:	Characteristic nut-like odor
Odour Threshold:	No data available
pH:	2.4 - 3.0 (5% as aqueous solution)
Melting Point/freezing point:	ca. 205-212 °C with decomposition Decomposes below the boiling point
Initial boiling point/boiling range:	No data available
Flash Point:	No data available
Evaporation Rate:	No data available
Flammability (solid; gas):	May form combustible dust concentrations in air. not highly flammable (Method: Regulation (EC) No. 440/2008, Annex, A.10)
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor Pressure (mmHg):	< 0.0000001 kPa at 25 °C
Vapor Density (air=1):	7.1
Relative Density (water=1):	No data available
Water solubility	ca. 200 g/l (20 °C) freely soluble
Solubility in other solvents	Ethanol: slightly soluble Diethylether: insoluble Chloroform: insoluble
Propylene glycol: soluble	
Partition coefficient (n-octanol/water)	No data available
Autoignition	No self-ignition observed in the Greuer oven at temperatures below melting point.
Decomposition temperature	Decomposes on heating. Potential for exothermic hazard
Viscosity	No data available
Other information:	

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	Dust may form explosive mixture in the air.
<b>Conditions to avoid:</b>	Exposure to moisture and heating.
<b>Incompatible materials:</b>	Alkaline solutions. Iron salts. Oxidizing agents.
<b>Hazardous decomposition products:</b>	formed under fire conditions – Carbon oxides, Hydrogen Chloride, Nitrogen oxides (NO <sub>x</sub> )
<b>Other decomposition products</b>	No data available
<b>In the event of fire:</b>	see section 5

## 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

**Skin contact:** Yes  
**Eye contact:** Yes  
**Inhalation:** Yes  
**Ingestion:** Yes

### Acute Toxicity Oral LD<sub>50</sub>:

LD<sub>50</sub> (Rat): 4000 mg/kg  
 LD<sub>50</sub> (Mouse): 5500 mg/kg

**Acute Toxicity Inhalation LC<sub>50</sub>:** No data available

**Skin corrosion/irritation:** No skin irritation (In vitro study, OECD Test Guideline 439)  
 May cause skin irritation in susceptible persons.  
 May be irritating, especially on damp skin.

**Serious Eye Damage/irritation:** Risk of **serious damage to eyes.**  
 (Bovine cornea, OECD Test Guideline 437, 4 h)

### Respiratory and/or Skin

**Sensitization:** No data available

**Aspiration Toxicity:** No data available

### STOT (Specific Target Organ Toxicity)

**Single Exposure:** No data available

### STOT (Specific Target Organ Toxicity)

**Repeated Exposure:** No data available

### Carcinogenicity:

**IARC** Not listed

**ACGIH®** Not listed

**OSHA** Not listed

**Reproductive Toxicity:** Long-term oral exposure may cause reproductive toxicity.

TDL <sub>o</sub> - Lowest published toxic dose	Oral	Rodent - rat	8040 ug/kg	female 14 week(s) pre-mating - 12 day(s) post-birth	Reproductive - Specific Developmental Abnormalities - Central Nervous System Reproductive - Effects on Newborn - biochemical and metabolic
TDL <sub>o</sub> - Lowest published toxic dose	Oral	Rodent - rat	4 gm/kg	female 6-15 day(s) after conception	Reproductive - Effects on Newborn - growth statistics (e.g.%, reduced weight gain)

**Germ Cell Mutagenicity:** No data available.

**Interactive Effects** No data available

**Additional Information** RTECS: UV1350000

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Toxicity to fish	Oncorhynchus mykiss (rainbow trout) LC50 (96 h) > 100 mg/l (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Daphnia magna (Water flea) EC50 (48 h) > 100 mg/l (nominal concentration) (OECD Test Guideline 202)
Toxicity to algae	Desmodesmus subspicatus (green algae) EbC50 (72 h) 5.3 mg/l (OECD Test Guideline 201) EbC0 (72 h) 1.2 mg/l
Persistence and degradability:	Readily biodegradable. 94 % (28 d) (OECD Test Guideline 301E)
<b>Bioaccumulative potential:</b>	No data available
<b>Mobility in soil:</b>	No data available
<b>Other adverse effects:</b>	No data available

## 13. DISPOSAL CONSIDERATIONS

<b>Wastes of Residues:</b>	Package product wastes. Close and label the waste receptacles and any unclean empty containers. Toxic to aquatic life. Must avoid discharge into water systems or environment. Dispose of according to local, provincial, and federal regulations.
<b>Contaminated Packaging:</b>	Do not reuse containers. Dispose of as unused product.

## 14. TRANSPORT INFORMATION

Not dangerous goods for transport. Keep separated from foodstuffs.

## 15. REGULATORY INFORMATION

CANADA DSL/NDSL: Pyridoxine Hydrochloride CAS # 58-56-0 is listed on the DSL.

## 16. OTHER INFORMATION

This information is based upon knowledge currently available.



More detailed information on the physical and chemical properties can be requested from the supplier. To the best of our knowledge, the information contained herein is accurate and complete. However, this should not be construed to imply any warranty or guarantee. Gurvey & Berry Co. Inc. shall not be held liable for any damage resulting from handling or from contact with the above chemical.

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This document will only be updated as needed.

N/A = not available.

N/D = not determined.