

Section 1 - Product and Company Information

Product Name PYRIDOXAL HCL SIGMA GRADE CRYSTALLINE
 Product Number P9130
 Brand SIGMA
 Company Sigma-Aldrich Canada, Ltd
 Address 2149 Winston Park Drive
 Oakville ON L6H 6J8 CA
 Technical Phone: 9058299500
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Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
PYRIDOXAL HYDROCHLORIDE	65-22-5	No
Formula	C8H9NO3 · ClH	
Synonyms	3-Hydroxy-5-(hydroxymethyl)-2-methylisonicotinaldehyde, hydrochloride * 2-Methyl-3-hydroxy-4-formyl-5-hydroxymethylpyridine hydrochloride * Vitamin B6 hydrochloride	
RTECS Number:	UV1225000	

Section 3 - Hazards Identification

HMIS RATING
 HEALTH: 0
 FLAMMABILITY: 0
 REACTIVITY: 0

NFPA RATING
 HEALTH: 0
 FLAMMABILITY: 0
 REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
 If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE
 If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE
 In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE
 In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
 N/A

AUTOIGNITION TEMP
 N/A

FLAMMABILITY
 N/A

EXTINGUISHING MEDIA
 Suitable: Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
 Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
 Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP
 Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
 User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
 Suitable: Keep tightly closed.
 Store at -20°C

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
 Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT
 Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.
 Hand: Protective gloves.
 Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

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Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Property	Value	At Temperature or Pressure
Appearance	Physical State: Solid	
Molecular Weight	203.63 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/BP Range	173 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A - not available

Section 10 - Stability and Reactivity

STABILITY
 Stable: Stable.
 Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
 Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION
 Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
 Skin Contact: May cause skin irritation.
 Skin Absorption: May be harmful if absorbed through the skin.
 Eye Contact: May cause eye irritation.
 Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
 Ingestion: May be harmful if swallowed.

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SIGNS AND SYMPTOMS OF EXPOSURE
 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral
 Rat
 2150 mg/kg
 LD50
 Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Excitement.

Subcutaneous
 Rat
 530 MG/KG
 LD50
 Remarks: Behavioral:Excitement. Behavioral:Convulsions or effect on seizure threshold.

Intravenous
 Rat
 320 MG/KG
 LD50
 Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Excitement.

Oral
 Mouse
 1800 mg/kg
 LD50
 Remarks: Lungs, Thorax, or Respiration:Dyspnea. Behavioral:Convulsions or effect on seizure threshold.

Intraperitoneal
 Mouse
 400 MG/KG
 LD50

Subcutaneous
 Mouse
 530 MG/KG
 LD50
 Remarks: Lungs, Thorax, or Respiration:Dyspnea. Behavioral:Convulsions or effect on seizure threshold.

Intravenous
 Mouse
 390 MG/KG
 LD50
 Remarks: Lungs, Thorax, or Respiration:Dyspnea. Behavioral:Convulsions or effect on seizure threshold.

Oral
 Dog
 > 500 mg/kg
 LD50

Oral
 Cat
 > 500 mg/kg
 LD50

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Remarks: Gastrointestinal:Hypermotility, diarrhea. Gastrointestinal:Changes in structure or function of salivary glands. Behavioral:Convulsions or effect on seizure threshold.

Intravenous
 Cat
 160 MG/KG
 LD50
 Remarks: Gastrointestinal:Hypermotility, diarrhea. Behavioral:Convulsions or effect on seizure threshold. Gastrointestinal:Changes in structure or function of salivary glands.

Intramuscular
 Cat
 152 MG/KG
 LD50
 Remarks: Behavioral:Convulsions or effect on seizure threshold. Gastrointestinal:Changes in structure or function of salivary glands. Gastrointestinal:Hypermotility, diarrhea.

Intravenous
 Rabbit
 465 MG/KG
 LD50
 Remarks: Peripheral Nerve and Sensation:Spastic paralysis with or without sensory change. Behavioral:Convulsions or effect on seizure threshold.

Intravenous
 Pigeon
 262 MG/KG
 LD50
 Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Convulsions or effect on seizure threshold.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
 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. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
 Proper Shipping Name: None
 Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
 Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

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UNITED STATES REGULATORY INFORMATION

SARA LISTED: No
 TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
 DSL: No
 NDSP: Yes

Section 16 - Other Information

DISCLAIMER
 For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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