

Material Safety Data Sheet

Date Printed: 12/MAY/2005

Date Updated: 14/MAR/2004

Version 1.1

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	PYRIDOXINE FREE BASE
Product Number	P5669
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
PYRIDOXINE FREE BASE	65-23-6	200-603-0	None

Formula	C8H11NO3
Molecular Weight	169.18 AMU
Synonyms	Adermine * Gravidox * Hydoxin * 3-Hydroxy-4,5-dimethylol-alpha-picoline * 5-Hydroxy-6-methyl-3,4-pyridinedimethanol * 2-Methyl-4,5-bis(hydroxymethyl)-3-hydroxypyridine * 2-Methyl-3-hydroxy-4,5-bis(hydroxymethyl)pyridine * 2-Methyl-3-hydroxy-4,5-dihydroxymethyl-pyridin (German) * 2-Methyl-3-hydroxy-4,5-di(hydroxymethyl)pyridine * 2-Picoline-4,5-dimethanol, 3-hydroxy- * Pridoxine * 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl- * Pyridoxin * Pyridoxine * Vitamin B6

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Irritating to eyes, respiratory system and skin.

4 - First Aid Measures

AFTER INHALATION

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

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious

amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

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

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

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

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition. Shut off leak if there is no risk.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

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

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing.

STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry place.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Form: Needles	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	159 - 162 °C	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:Soluble. Other Solvents: ALCOHOL, ACETONE	

10 - Stability and Reactivity

STABILITY

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

11 - Toxicological Information

RTECS NUMBER: UV1300000

ACUTE TOXICITY

TCLo

Oral

Man

5,143 mg/kg

LD50

Oral

Rat

0.004 mg/kg

LD50 LD50

Oral Oral

Rat Rat

4000 mg/kg 4000 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Behavioral:Convulsions or effect on seizure threshold.

LD50 LD50
Intraperitoneal Intraperitoneal
Rat Rat
1500 MG/KG 1500 MG/KG
Remarks: Lungs, Thorax, or Respiration:Respiratory depression.
Lungs, Thorax, or Respiration:Respiratory depression.

LD50 LD50
Subcutaneous Subcutaneous
Rat Rat
3100 MG/KG 3100 MG/KG
Remarks: Behavioral:Convulsions or effect on seizure threshold.
Behavioral:Convulsions or effect on seizure threshold.

LD50 LD50
Intravenous Intravenous
Rat Rat
657 MG/KG 657 MG/KG
Remarks: Behavioral:Convulsions or effect on seizure threshold.
Behavioral:Convulsions or effect on seizure threshold.

LD50 LD50
Intraperitoneal Intraperitoneal
Mouse Mouse
966 MG/KG 966 MG/KG

LD50 LD50
Intravenous Intravenous
Mouse Mouse
545 MG/KG 545 MG/KG

SIGNS AND SYMPTOMS OF EXPOSURE

People who have consumed more than 2000 mg on a daily basis have experienced a toxic sensory neuropathy. Withdrawal from 200 mg daily has produced dependency symptoms. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 2268 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (6W MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology,motility, and count).

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

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.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xi

Irritant.

R-PHRASES: 36/37/38

Irritating to eyes, respiratory system and skin.

S-PHRASES: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

16 - Other Information

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 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

DISCLAIMER

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