



SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Thiamine Hydrochloride
PRODUCT NUMBER: T390
COMPANY INFO: PhytoTech Labs Inc.
14610 W 106th St. Lenexa, KS 66215
Phone: 1-888-749-8682 or 1-913-341-5343
www.phytotechlab.com
EMERGENCY PHONE NUMBER 1-800-535-5053 - US Only
(INFOTRAC): 1-352-323-3500 - International
RECOMMENDED USE: For Laboratory-use or Further Manufacture only
Products sold by PhytoTech Labs Inc. are intended for research and laboratory use only.
RESTRICTIONS ON USE: Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, in vitro diagnostics, or as household chemicals.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

GHS Classification:

Not a hazardous substance or mixture.

GHS Label elements, including hazard and precautionary statements:

Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 3-[(4-Amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methylthiazolium Chloride Hydrochloride; Vitamin B₁ Hydrochloride
CAS No: 67-03-8
Formula: C₁₂H₁₇ClN₄OS•HCl
Molecular Weight: 337.27 g/mol
EC No.: 200-641-8

Ingredient	CAS Number	Percent	Hazardous
Thiamine Hydrochloride	67-03-8	>98 %	No exposure limits established by OSHA or ACGIH

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry

Symptoms

First Aid Procedures

Ingestion

May cause irritation if swallowed

If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. **Get medical attention.**

Inhalation

May cause irritation to respiratory tract

Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. **Get medical attention.**

Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.
Special Protective Equipment and Precaution for Firefighters:	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.
Hazardous Combustion Products:	May emit toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Method of Containment and Cleanup:	Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let product enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling:	Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide adequate ventilation at places where dust is formed. Wash thoroughly after use.
Conditions for Safe Storage:	Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Protect from light and moisture. Product is light sensitive and hygroscopic.
Incompatibilities:	Strong oxidizing agents
Recommended Storage Temperature:	Room Temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs):	None
Threshold Limit Values (TLVs):	None
Engineering Controls:	Handle in accordance to general industrial hygiene and safety practice.
Personal Protective Equipment (PPE):	

Eye/Face Protection:	Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.
Skin Protection:	Protective gloves
Body Protection:	Lab coat
Respiratory Protection:	Respiratory protection is not required. Use N95 (US) or type P1 (EN 143) dust mask where dust level is nuisance. A NIOSH/MSHA approved air purifying respirator is recommended where airborne

concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to off-white powder	
pH (0.01 g/L):	3.0 – 5.0	
Solubility:	Soluble in water	
Melting Range:	248°C	
Vapor Density:	No data available	
Vapor Pressure:	No data available	
Specific Gravity:	No data available	
Odor:	May have slight characteristic odor	
Odor Threshold:	No data available	
Viscosity:	No data available	
Relative Density:	1.4	
Evaporation Rate:	No data available	
Initial Boiling Point and Boiling Range:	No data available	
Flammability (solid, gas):	No data available	
Partition coefficient: n-octanol/water):	No data available	
Auto-ignition Temperature:	No data available	
Decomposition Temperature:	No data available	
Flash Point (Closed Cup):	No data available	
Flammable Limits:	Upper (%) – No data available	Lower (%) – No data available

10. STABILITY AND REACTIVITY

Reactivity:	No data available	
Chemical Stability:	Stable under normal conditions of use	
Possibility of Hazard Reactions:	No data available	
Conditions to Avoid:	No data available	
Incompatibles Materials:	Strong oxidizing agents	
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen chloride gas, chlorine	

11. TOXICOLOGICAL INFORMATION

Toxicity:	LD ₅₀ (Oral-Rat)(mg/Kg)	3710
	LD ₅₀ (IV-Rat)(mg/Kg)	No data available
	LD ₅₀ (IP-Mouse)(mg/Kg)	No data available
Carcinogenicity:	NTP:	No
	IARC:	No
	OSHA Reg:	No
Reproductive Toxicity:	No data available	
Specific Target Organ Toxicity:	Single Exposure:	No data available
	Repeated Exposure:	No data available

Target Organs: No data available
Routes of Entry: Ingestions, skin and eye contact
NIOSH/RTECS NO: XI7350000

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A
Reportable Quantity: N/A
UN/NA: N/A
Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A
Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A
UN/NA: N/A

Labels: N/A

15. REGULATORY INFORMATION

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No
Section 313 Ingredients: No
Section 304 (EHS/CERCLA) Ingredients: No
Section 311/312 Hazard: No SARA Hazards

Massachusetts Right to Know Components:	This product is not on the Massachusetts Substance List (MSL).
Pennsylvania Right to Know Components:	This product is not listed on the Pennsylvania Code’s Hazardous Substance List (Chapter 323).
New Jersey Right to Know Components:	This product is not listed amongst the New Jersey Right to Know Hazardous Substance Fact Sheets
California Prop. 65 Components:	This product is not known to the State of California to cause cancer or reproductive toxicity.

16. OTHER INFORMATION

HMIS Rating:

Health Hazard	Flammability	Physical Hazard	Personal Protection
1	0	0	C

NFPA Rating:

Health Hazard	Flammability	Instability	Special Hazard
0	0	0	

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Revision Date: 7 July 2025