



MATERIAL SAFETY DATA SHEET

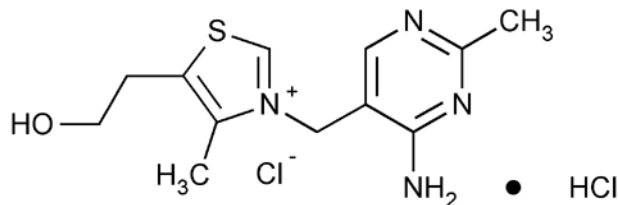
Thiamine Hydrochloride

1. Product Identification and Use

Product name	Thiamine Hydrochloride
Company information	Manufacturer JIANGXI TIANXIN PHARMACEUTICAL CO., LTD. Address: Le'anjiang Industrial Zone, Leping, Jiangxi, 333300 China Tel / Fax: +86-798-6702928
Use	Active pharmaceutical ingredient, nutritional ingredient.
Emergency telephone	+86-13651606360 Kyle Wang (王万源), Intl. Business Manager

2. Composition / Information on Ingredients

Chemical name	Thiamine Hydrochloride 3-[(4-Amino-2-methylpyrimidin-5-yl)methyl]-5-(2-hydroxyethyl)-4-methylthiazolium chloride hydrochloride.
Synonyms	Thiamine Hydrochloride Vitamin B ₁ Hydrochloride
CAS No.	67-03-8
Molecular formula	C ₁₂ H ₁₈ N ₄ O ₂ Cl ₂
Molecular weight	337.27 g/mol
Constitution	



3. Hazards Identification

Potential Acute Health Effects	Irritant in case of eye contact. Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.
Potential Chronic Health Effects	Irritant in case of eye contact. Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

4. First Aid Measures

Eye Contact	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

5. Fire Fighting Measures

Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...), sulfur oxides (SO ₂ , SO ₃ ...), halogenated compounds.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label.
Storage	Preserve in tight, light-resistant containers, protected from light.


8. Exposure Controls / Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. Physical and Chemical Properties

Physical state and appearance	White or almost white, crystalline powder or colorless crystals.
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Thiamine Hydrochloride

Molecular Weight	337.27 g/mol
Melting Point	Decomposes. (248°C or 478.4°F)
Solubility	Freely soluble in water, soluble in glycerol, slightly soluble in alcohol.
10. Stability and Reactivity	
Chemical stability	Stable under normal temperatures and pressures.
Incompatibility	Alkalis, alkaline drugs, oxidizing and reducing agents.
Conditions / Hazards to Avoid	Avoid dust cloud formation.
Corrosive Properties	Non-corrosive in presence of glass.
Oxidizer Properties	Not an oxidizer.
11. Toxicological Information	
Toxicity data	Acute oral toxicity (LD50): 3710 mg/kg [Rat].
Chronic Overexposure Effects	There are no known chronic effects associated with this material.
12. Ecological Information	
Data not yet available.	
13. Disposal Considerations	
General	Spills should be contained and placed in suitable containers for disposal. This material is not regulated by RCRA or CERCLA. Wear appropriate respiratory protection and protective clothing and provide adequate ventilation during clean-up.
Waste Disposal	Incinerate in a licensed facility. Do not discharge into waterways or sewer systems.
14. Transport Information	
DOT Classification	Not a DOT controlled material (USA).
DOT (Pictograms)	
IMO/IMDG Classification	No classified as hazardous.

15. Regulatory Information

Federal and State Regulations:	TSCA 8(b) inventory: Thiamine HCl
Other Classifications:	WHMIS (Canada): Not controlled under WHMIS DSCL (EEC): This product is not classified according to the EU regulations.

16. Other Information

Use	Active pharmaceutical ingredient, nutritional ingredient, feed additive.
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Creation date: Jan 1, 2018

Last update: Jan 2, 2020

Approved by: Zhang Ping

Designation: QA Manager

Signature:



The information in this MSDS is based on current scientific knowledge. It should not be taken as expressing or implying any warranty concerning product characteristics.