

## Thiamine hydrochloride Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Thiamine hydrochloride

**Catalog No.:** CFN90068

**Cas No.:** 67-03-8

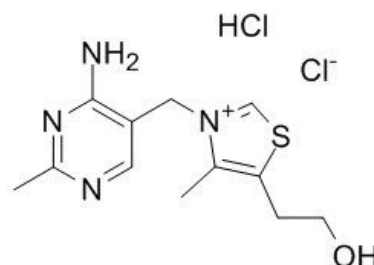
**Purity:** >=99%

**M.F:** C<sub>12</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>4</sub>OS

**M.W:** 337.27

**Physical Description:** White cryst.

**Synonyms:**



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Ingredient in supplements, beverages;
5. Synthetic precursor compounds;
6. Intermediates & Fine Chemicals;
7. Others.

### [ Source ]

The herbs of *Saccharum sinense*.

## **[ Biological Activity or Inhibitors ]**

Thiamine hydrochloride is an efficient catalyst for the synthesis of amidoalkyl naphthols.<sup>[1]</sup>

Thiamine hydrochloride has prophylactic potential on lead induced lipid peroxidation in rat liver and kidney.<sup>[2]</sup>

Thiamine hydrochloride, pyridoxine hydrochloride and calcium-d-pantothenate are applied apple juice concentrates (AJC) at various doses in order to reduce the patulin content. <sup>[3]</sup>

## **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

## **[ HPLC Method ]<sup>[4]</sup>**

Mobile phase: 0.1% Methanolic hexane sulphonic acid sodium salt- 0.01 M Phosphate buffer containing 0.1% hexane sulphonic acid sodium salt(adjusted to an apparent pH of 2.7),gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 288 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Lei M, Ma L, Hu L. *Cheminform*, 2009, 50(46):6393-7.

[2] Senapati S K, Dey S, Dwivedi S K, *et al. Vet. Hum. Toxicol.*, 2000, 42(4):236-7.

[3] Yazici S, Velioglu Y S. *Mol. Nutr. Food Res.*, 2002, 46(4):256-7.

[4] El-Gindy A, El-Yazby F, Mostafa A, *et al. J. Pharm. Biomed. Anal.*, 2004, 35(4):703-13.

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