



MATERIAL SAFETY DATA SHEET

According to the European Directive 1907/2006/ EC

Product: **THIAMINE**

Version of 23/11/2010

1 – Identification of the substance/mixture and of the company/undertaking

Product name: THIAMINE

Product use: product used in enology

Supplier: SOFRALAB

79 AV. A.A. Thévenet - BP 1031 - 51319 MAGENTA - FRANCE

Email address: lcq@sofralab.com

Phone. +33 (0)3 26 51 29 30 – Fax number +33 (0)3 26 51 87 60

Emergency number: ORFILA +33 (0)1 45 42 59 59

2 – Hazards identification

- This product is not classified as flammable. Refer to the recommendations regarding the other products present on the site.
- No specific hazard under normal conditions of use.
- **Substance classification in accordance with the regulation (EC) No 1272/2008:**
Not classified
- **Substance classification in accordance with the directive 67/548/EEC:**
Not classified
- **Labelling:**
None

3 – Composition/information on ingredients

- Thiamine hydrochloride or Vitamin B1
Chemical formula: $C_{12}H_{18}Cl_2N_4OS$
CAS N° 67-03-8 EC N° 200-641-8
Classifications:
 - In accordance with the regulation (EC) No 1272/2008, which will enter into force on 1st December 2010 and the directive 67/548/EEC, which will be repealed on 1st June 2015 :
Substance is not classified as dangerous.

MATERIAL SAFETY DATA SHEET

Product: THIAMINE

Version of 23/11/2010

4 - First aid measures

General observations:	In case of doubt or if symptoms persist, seek medical advice. Symptomatic treatment. NEVER give anything by mouth to an unconscious person.
In case of skin contact:	Remove contaminated clothing and immediately wash skin with water and soap for 10 to 15 minutes. In case of irritation or if contact is widespread and prolonged, seek medical advice.
In case of eye contact:	Rinse immediately with plenty of cold water for 10 to 15 minutes while holding the eyelid(s) open. If contact lenses are used, remove the lenses and continue washing the eyes. Protect eyes with a light bandage or a clean and dry handkerchief. If irritation persists, consult an ophthalmologist.
In case of ingestion:	Rinse mouth thoroughly. Do NOT induce vomiting, DO NOT provide drink. Have the victim rest. Consult a physician and show the label.
In case of inhalation:	Remove victim to fresh air. If breathing is irregular or has stopped, administer artificial respiration and seek medical advice. If the person is unconscious, place in the recovery position and call an ambulance. In case of complications, consult a physician.

5 - Firefighting measures

Recommended fire-fighting agents:	Dry powder, carbon dioxide, water spray, foam. Cool the containers exposed to the fire with water spray.
Protective equipment:	Wear a complete fire suit and respiratory protection (insulating self-contained breathing apparatus).
Combustion products:	Do not breathe smoke.
Additional information:	Prevent fire extinguishing water from contaminating surface or ground waters. Do not spray water directly on container to prevent product spills.

MATERIAL SAFETY DATA SHEET

Product: THIAMINE

Version of 23/11/2010

6 - Accidental release measures

Individual precautions:	Consult protection measures cited in paragraphs 7 and 8. Avoid contact with the product. Avoid dust formation. If spill is large, evacuate the personnel and only allow intervention by trained personnel equipped with safety apparatus.
Measures for environmental protection:	If the product has entered a waterway and/or drainage system or has contaminated the ground and/or the vegetation, notify the competent authorities.
Cleaning measures:	Collect the dry product using mechanical equipment and rinse the contaminated surface with plenty of water. Keep in suitable and closed containers for recycling or disposal of collected spill according to applicable regulation (See paragraph 13).

7 - Handling and storage

These recommendations are applicable to the working area where the product is handled.

Handling:	Avoid dust formation. Avoid inhalation and skin or eye contact. Do not drink or eat in working area. See paragraph 8. Provide ventilation and adequate equipment disposal.
Fire prevention:	Store away from ignition sources. Prevent access to unauthorized personnel.
Storage:	Store tightly closed container in a cool, dry and well ventilated area.

8 - Exposure controls/personal protection

Use individual protective equipment in accordance with Directive 89/686/EEC



Compulsory protective equipment

Select personal protective equipment according to the concentration and quantity of hazardous substances and workplace. Consult supplier with regards to the chemical resistance of protective equipment.



Respiratory protection

Wear a dust mask type P in poorly ventilated area.



Eye protection

Wear safety goggles (EN 166) when dust concentration in the atmosphere is excessive.



Hand protection

Not required under normal conditions of use

Hygiene measures: Immediately remove any contaminated clothing. Preventive protection of skin. Wash hands and face after work.

Maintain local and work areas perfectly clean, aerate and clean frequently.

MATERIAL SAFETY DATA SHEET

Product: THIAMINE

Version of 23/11/2010

9 - Physical and chemical properties

General information:

- Appearance: Powder or dust
- Colour: White
- Odour: Slight
- Molecular mass: 337.27 g/mol

Important information regarding health, safety and environment:

- Partition coefficient: NA
- pH in aqueous solution: 2.7 – 3.3
- Density (20°C): NA

Additional information:

- Water solubility (at 20°C): Soluble
- Melting / boiling point: 248°C
- Auto-ignition temperature: > 400°C
- Thermal decomposition: NA
- Apparent density: NA
- Vapor pressure (20°C): <0.001mm
- Flash point: > 93°C

10 - Stability and reactivity

The preparation is stable under the handling and storage conditions recommended in paragraph 7 of the MSDS.

- **Conditions to avoid:** Intense heat/ Avoid humidity.
- **Substances to avoid:** Strong oxidizing agents.
- **Hazardous decomposition products:** Carbon dioxide.

11 - Toxicological information

Acute toxicity: LD 50 (mouse) 8530 mg/kg

Other dangerous properties can not be excluded. The product should be handled with the care usual when dealing with a chemical product.

12 - Ecological information

Use the product sensibly. Avoid release to the environment.

13 – Disposal considerations

Product: Chemical products should be disposed of or recycled in accordance with national regulations.

Packaging: Packaging should be disposed of in accordance with the regulations applicable in each country or should be disposed of through a recycling packaging program.

MATERIAL SAFETY DATA SHEET

Product: THIAMINE

Version of 23/11/2010

MATERIAL SAFETY DATA SHEET

Product: THIAMINE

Version of 23/11/2010

14 - Transport information

Exempt from transport classification and labelling.

15 - Regulatory information

Classification in accordance with: Directive 67/548/EEC (Dangerous substances) and its versions. Regulation (EC) N°1272/2008 and its modifications (453/2010 Annex I) were also taken into consideration.

16 - Other information

The information presented in this material safety data sheet is based on the data provided by our suppliers.

The information contained in this data sheet is based on our knowledge at the date shown above. It exclusively concerns the product in question and does not guarantee a specific quality. The user must make sure of the conformity and completeness of information with regards to the specific use of the product.

This data sheet cancels and replaces any previous version.

R phrase text cited in paragraph 2 and 3: None.