



# MATERIAL SAFETY DATA SHEET

According to the European Directive 2001/ 58/ EC

Product name: **BIDOSES - BISULFITE**

Version n°03 of 29/10/2007

## 1 – Product and company identification

Product name: **BIDOSES - BISULFITE**

Product use: product used in oenology

Supplier: SOFRALAB – MARTIN VIALATTE ŒNOLOGIE – STATION ŒNOTECHNIQUE DE CHAMPAGNE  
79 AV. A.A. Thévenet - BP 1031 - 51319 MAGENTA - FRANCE

Phone +33 (0)3 26 51 56 45 - Fax +33 (0)3 26 51 87 60

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

## 2 - Composition/Information on ingredients

### Ammonium bisulfite solution

CAS N°: 10 192-30-0

Chemical formula:  $(\text{NH}_4) \text{H SO}_3$

EC N°: 233-469-7

Hazard symbol: Xi, irritant

Risk phrases: R31, R36/37

Safety phrase: S26

## 3 – Hazard identification

Classified as hazardous substance according to applicable regulations.

Hazards to humans: Irritating to eyes and respiratory system. In contact with acid, releases sulphur dioxide ( $\text{SO}_2$ ), a toxic gas.

Hazards to the environment: Release of this product into surface waters can lead to a reduction of the dissolved oxygen and increase of ammonia with harmful effects on living organisms.

Physical and chemical hazards: Non-flammable product. Limited risk level.

Fire and explosion : In case of fire in close proximity, a toxic gas, sulphur dioxide ( $\text{SO}_2$ ), can be released.

# MATERIAL SAFETY DATA SHEET

Product name: **BIDOSES - BISULFITE**

Version n°03 of 29/10/2007

## 4 – First aid measures

Consult a physician immediately.

Inhalation: Remove victim to fresh air. If breathing is difficult, provide oxygen or give artificial respiration.

Skin contact: Remove contaminated clothing. Wash with plenty of water for approximately 15 minutes.

Eye contact: Wash immediately with water for at least 15 minutes. Consult a physician.

Ingestion: Drink water. Consult a physician.

## 5 – Fire-fighting measures

Recommended extinguishing agents: Non-flammable. Use water in case of nearby fire.

Fire-fighting agent to avoid: None.

Hazardous combustion product: Sulfur dioxide – Ammonia.

Protective measures in case of intervention: Wear self-contained breathing apparatus.

Additional information: contaminated extinguishing water must be disposed of in accordance with applicable local regulations.

## 6 – Accidental release measures

Collection and removal measures:

- Small quantities: wash with water and treat contaminated water (oxidation with hydrogen peroxide and neutralization with sodium carbonate).
- Large quantities: contain spill with sand or earth and collect the product in suitable containers using mechanical equipment.

Individual precautions: Supply sufficient ventilation. Wear protective clothing. Stay up-wind.

Measures for environmental protection: Avoid release of product into sewage systems or canalizations.

# MATERIAL SAFETY DATA SHEET

Product name: **BIDOSES - BISULFITE**

Version n°03 of 29/10/2007

## 7 – Handling and storage

**Handling:** Carefully avoid local heating which could lead to violent exothermic reactions. Product slowly releases sulfur dioxide at room temperature as well. In cold climates, maintain the temperature above 10°C to avoid crystallization

**Storage:** Use suitable containers. Store in a cool, dry and well ventilated area. Do not store near acids, oxidizing agents or other products which are able to liberate acids.

## 8 – Exposure control/Personal protection



**Respiratory protection:** Filter mask with cartridge to protect against sulfur dioxide.



**Skin protection:** Chemical protective clothing.



**Hand protection:** Chemical resistant gloves.



**Eye protection:** Safety glasses with lateral protection. Do not wear contact lenses.

**Exposure limits:** TLV-TWA: unknown (2ppm) (SO<sub>2</sub>) (ACGIH 2005).

## 9 – Physical and chemical properties

Appearance / physical state:	Clear liquid
Colour:	Lemon yellow
Odour:	sulfur dioxide
Melting point:	not applicable
Boiling point:	unknown
Specific gravity at 20°C: concentration)	1.30-1.40 kg/dm <sup>3</sup> (variable according to
Water solubility:	Miscible in all proportions in water.
Flammability point:	not applicable
Flammable limits (vol. % in air):	not applicable
Autoignition temperature:	not applicable
pH:	4.5 - 5.5
Coefficient of n-octanol/water distribution:	unknown

**MATERIAL SAFETY DATA SHEET****Product name: BIDOSES - BISULFITE**

Version n°03 of 29/10/2007

**10 - Stability and reactivity**

Conditions to avoid: Intense heat. If exposed to intense heat, product may undergo an exothermic reaction leading to the production of ammonium thiosulfate and sulfur with release of sulfur dioxide. At the end of the exothermic reaction, all the bisulfite is transformed into ammonium sulfate and sulfur with a significant heat production.

Substances to avoid: Acids – Oxidants – Nitrites.

Hazardous decomposition products: Sulfur dioxide – Ammonia.

**11 – Toxicological information**

Routes of entry: Inhalation: yes  
Ingestion: exposure not probable  
Contact: yes

Acute toxicity: Data unavailable

Effects through inhalation: Irritation of the respiratory system.

Effects through ingestion: Irritation of mouth (exposure not probable).

Local effect on skin: Non irritant – Rare cases of irritation with subjects allergic to this product.

Local effect on eyes: Irritation.

Additional information: Unknown

**12 – Ecological information**

Release of this product into surface waters can lead to a significant reduction of the dissolved oxygen and increase of ammonia with harmful effects on living organisms.

**13 – Disposal considerations**

Product: Inorganic product, do not release into biological wastewater treatment systems. Dispose of in accordance with applicable regulations, through authorized waste disposal companies.

Contaminated packaging: Open packages and empty contents completely. Dispose of according to packaging material.

# MATERIAL SAFETY DATA SHEET

**Product name: BIDOSES - BISULFITE**

Version n°03 of 29/10/2007

## 14 – Transport information

The product does not fall under ADR/RID and IMO regulations, with regards to land and sea transport of dangerous goods and if product is specifically identified, based on paragraph 2.2.8.1.8 of the ADR/RID (2005) and paragraph 2.8.2.2 – class 8 of the IMDG code (Amdt 31-02).

Additional information: Transport in a semi-trailer pulled by a truck. Ensure that the driver is well aware of the potential risks associated with the product to be shipped and knows the protocol in case of emergency.

## 15 – Regulatory information

Preparation classified as dangerous according to the Directive 1999/45/EC

Hazard symbol:



Xi Irritant

Risk phrases:

R31 : Contact with acid liberates toxic gas.

R36/37 : Irritating to eyes and respiratory system.

Safety phrase:

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Risks associated with sulfur dioxide:

toxic by inhalation, gas heavier than air. Can accumulate in confined area, specifically close to or below the ground. At high concentrations is corrosive to eyes, respiratory system and skin.

Prior to using this product within the frame of new processes or experimentations, it is recommended to carry out a study on the safety and material compatibility of this product.

## 16 – Other information

The vertical lines in the left margin indicate the modifications made to the precedent version.

« This data sheet completes the technical notices of utilization but does not replace them. The information provided is based on our current knowledge of the product at the time of publication. They are given in good faith. Moreover, the user's attention should be drawn to the possible risks incurred if the product were used for other purposes than those for which it has been designed.

In any case, the data sheet does not release the user from knowing and applying all regulations related to his/her activity. He/she will be solely responsible for taking the necessary precautions related to the use of the product. »