

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019
Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 1 of 9
Print date: 12/04/2021

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: SULPHUR DIOXIDE
Product Code: MP001
Chemical Name: sulphur dioxide
Index No: 016-011-00-9
CAS No: 7446-09-5
EC No: 231-195-2
Registration No: 01-2119485028-34-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against.

Preserving / antioxidants used in food processing industry.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **PRODUCTOS AGROVIN S.A.**
Address: Avda. de los Vinos S.N.
City: 13600 - Alcázar de San Juan
Province: Ciudad Real (ESPAÑA)
Telephone: + 34 926 55 02 00
Fax: + 34 926 54 62 54
E-mail: calidad@agrovin.com
Web: www.agrovin.com

1.4 Emergency telephone number: + 34 926 55 02 00 (Only available during office hours)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EU) No 1272/2008:

Acute Tox. 3 : Toxic if inhaled.
Press. Gas : Contains gas under pressure; may explode if heated.
Skin Corr. 1B : Causes severe skin burns and eye damage.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Danger

H statements:

H280 Contains gas under pressure; may explode if heated.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.

P statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019

Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 2 of 9

Print date: 12/04/2021

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P321 Specific treatment (see ... on this label).

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains:
sulphur dioxide

2.3 Other hazards.

The product may have the following additional risks:
Suffocation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Chemical Name: [1] sulphur dioxide
Index No: 016-011-00-9
CAS No: 7446-09-5
EC No: 231-195-2
Registration No: 01-2119485028-34-0000
[1] Substance with a Community workplace exposure limit (see section 8.1).

3.2 Mixtures.

Not Applicable.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Immediate medical attention is required. It is recommended to move the affected person out of the exposure area. Delayed effects may occur after the exposure to the product.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Eye contact.

Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Don't let the person to rub the affected eye.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.

Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.

Toxic Product, accidental contact may result in serious respiratory difficulties, alteration of the central nervous system and in extreme cases, unconsciousness. Immediate medical assistance is required.

4.3 Indication of any immediate medical attention and special treatment needed.

Request immediate medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

SECTION 5: FIREFIGHTING MEASURES.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE

Version 1 Date of compilation: 12/03/2019

Version 3 (replaces version 2)

Revision date: 13/01/2021



Page 3 of 9

Print date: 12/04/2021

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO₂.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

During a fire and depending on its magnitude the following may occur:

- Explosions.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

The product evaporates quickly, completely remaining in the gaseous phase, so there is no risk of contamination for the aquatic and terrestrial environment.

6.3 Methods and material for containment and cleaning up.

Use soapsuds to detect small leaks. Stop the leak if this can be done safely. Ensure adequate ventilation to prevent the accumulation of gases or vapours.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Pressurised gases must be handled by suitably trained and experienced individuals. Use equipment suitable for supply pressure and temperature. Protect containers against physical damage and keep valves clean and in perfect condition. Do not tamper with original packaging.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. It must not be stored under conditions conducive to corrosion of the container. Protect containers against physical damage and inspect them regularly to ensure they are in good condition.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE

Version 1 Date of compilation: 12/03/2019

Version 3 (replaces version 2)

Revision date: 13/01/2021



Page 4 of 9

Print date: 12/04/2021

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
H2	ACUTE TOXIC	50	200

7.3 Specific end use(s).

Antioxidant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
sulphur dioxide	7446-09-5	European Union [1]	Eight hours	0,5	1,3
			Short term	1	2,7
		Éire [2]	Eight hours	0,5	1,3
			Short term	1	2,7
		United States [3] (Cal/OSHA)	Eight hours	2	
			Short term	5	
		United States [4] (NIOSH)	Eight hours	2	
			Short term	5	
		United States [5] (OSHA)	Eight hours	5	13
			Short term		

[1] According both Binding Occupational Exposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

[2] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).

[3] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[4] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health, Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.

[5] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
sulphur dioxide CAS No: 7446-09-5 EC No: 231-195-2	DNEL (Workers)	Inhalation, Long-term, Local effects	1,3 (mg/m ³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	Preserving / antioxidants used in food processing industry.
Breathing protection:	
PPE:	Filter mask for protection against gases and particles.
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards:	EN 136, EN 140, EN 405
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.



-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE






Version 1 Date of compilation: 12/03/2019

Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 5 of 9

Print date: 12/04/2021

Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.				
Filter Type needed:	A2				
Hand protection:					
PPE:	Non-disposable protective gloves against chemicals.				
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.				
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420				
Maintenance:	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.				
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.				
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35
Eye protection:					
If the product is handled correctly, no individual protection equipment is necessary.					
Skin protection:					
PPE:	Chemical protective clothing				
Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.				
CEN standards:	EN 464, EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034				
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.				
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.				
PPE:	Anti-static safety footwear against chemicals.				
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.				
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345				
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.				
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: N.A./N.A.

Colour: N.A./N.A.

Odour: N.A./N.A.

Odour threshold: N.A./N.A.

pH: N.A./N.A.

Melting point: N.A./N.A.

Boiling Point: N.A./N.A.

Flash point: N.A./N.A.

Evaporation rate: N.A./N.A.

Inflammability (solid, gas): N.A./N.A.

Lower Explosive Limit: N.A./N.A.

Upper Explosive Limit: N.A./N.A.

Vapour pressure: N.A./N.A.

Vapour density: N.A./N.A.

Relative density: N.A./N.A.

Solubility: N.A./N.A.

Liposolubility: N.A./N.A.

Hydrosolubility: N.A./N.A.

Partition coefficient (n-octanol/water): N.A./N.A.

Auto-ignition temperature: N.A./N.A.

Decomposition temperature: N.A./N.A.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019

Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 6 of 9

Print date: 12/04/2021

Viscosity: N.A./N.A.
Explosive properties: N.A./N.A.
Oxidizing properties: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

If the storage conditions are satisfied, does not produce dangerous reactions.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

Contains gas under pressure; may explode if heated.

10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- Shocks.

10.5 Incompatible materials.

Avoid the following materials:

- Flammable materials.
- Explosives materials.
- Corrosive materials.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

Splatters in the eyes can cause irritation and reversible damage.

Toxicological information.

Name	Acute toxicity			
	Type	Test	Kind	Value
sulphur dioxide	Oral			
	Dermal			
	Inhalation	LC50	Rat	2520 ppm (1 h)
CAS No: 7446-09-5	EC No: 231-195-2			

a) acute toxicity;
Product classified:
Acute toxicity (Inhalation), Category 3: Toxic if inhaled.

b) skin corrosion/irritation;
Product classified:
Skin Corrosive, Category 1B: Causes severe skin burns and eye damage.

c) serious eye damage/irritation;
Not conclusive data for classification.

d) respiratory or skin sensitisation;

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019
Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 7 of 9
Print date: 12/04/2021

Not conclusive data for classification.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Not conclusive data for classification.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
sulphur dioxide CAS No: 7446-09-5 EC No: 231-195-2	Fish	LD50	Atlantic menhaden Breboortia tyrannus	3.200 ug/l (1 h)
	Aquatic invertebrates			
	Aquatic plants	LD50	Salvenus esp.	5000 ppm (1 h)

12.2 Persistence and degradability.

No information is available regarding the biodegradability.
No information is available on the degradability. No information is available about persistence and degradability of the product.
The product evaporates quickly and enters the gas phase at room temperature. Information on its persistence and degradability is not relevant.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation.

12.4 Mobility in soil.

No information is available about the mobility in soil.
Soil or water contamination is unlikely due to high volatility of the product.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019
Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 8 of 9
Print date: 12/04/2021

Dispose of packaging through the supplier. Transport, unloading, treatment or disposal activities may be subject to additional local/national legislation. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN1079

14.2 UN proper shipping name.

Description:

ADR: UN 1079, SULPHUR DIOXIDE, 2.3 (8), (C/D)

IMDG: UN 1079, SULPHUR DIOXIDE, 2.3 (8)

ICAO/IATA: PROHIBITED

14.3 Transport hazard class(es).

Class(es): 2

14.4 Packing group.

Packing group: Not applicable.

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

Labels: 2.3, 8



Hazard number: 268

ADR LQ: 0

IMDG LQ: 0

ICAO LQ: Not applicable.

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-C,S-U

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

-Continued on next page.-

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

MP001-SULPHUR DIOXIDE



Version 1 Date of compilation: 12/03/2019
Version 3 (replaces version 2)

Revision date: 13/01/2021

Page 9 of 9
Print date: 12/04/2021

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): H2

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Classification codes:

Acute Tox. 3 : Acute toxicity (Inhalation), Category 3

Press. Gas : Gases under pressure, Liquefied

Skin Corr. 1B : Skin Corrosive, Category 1B

Changes regarding to the previous version:

- Changes in the composition of the product (SECTION 3.2).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CEN: European Committee for Standardization.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

EC50: Half maximal effective concentration.

PPE: Personal protection equipment.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.