

SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

sulfur dioxide, liquefied, under pressure

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name : sulfur dioxide, liquefied, under pressure

Synonyms : bisulfite, liquefied, under pressure; dioxide of sulfur, liquefied, under pressure; fermenicide; R-764; soufre dioxide,

liquefied, under pressure; sulfur dioxide; sulfurous acid anhydride, liquefied, under pressure; sulfurous acid, liquefied, under pressure; sulfurous anhydride, liquefied, under pressure; sulfurous oxide, liquefied, under pressure; sulfur oxide,

liquefied, under pressure; sulfur superoxide, liquefied, under pressure; sulphur dioxide

Registration number REACH : 01-2119485028-34

Product type REACH : Substance/mono-constituent

CAS number : 7446-09-5 EC index number : 016-011-00-9 **EC** number : 231-195-2 **RTECS** number : WS4550000 Molecular mass : 64.06 g/mol **Formula** : SO2

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

1.2.1 Relevant identified uses

Natural gas production, side product

Industrial use

1.2.2 Uses advised against

See heading 15.1: Reach Annex XVII - Restriction

1.3 Details of the supplier of the safety data sheet:

Supplier of the safety data sheet

BALCHEM NV Westvaartdijk 85

B-1850 Grimbergen Belgium

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info.grimbergen@balchem.com

Distributor of the product

BALCHEM NV

Westvaartdijk 85

B-1850 Grimbergen Belgium

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1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Press. Gas	Liquefied gas	H280: Contains gas under pressure; may explode if heated.
Acute Tox.	category 3	H331: Toxic if inhaled.
Skin Corr.	category 1B	H314: Causes severe skin burns and eye damage.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

T; R23 - Toxic by inhalation.

C; R34 - Causes burns.

2.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

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Signal word Danger

H-statements

H280 Contains gas under pressure; may explode if heated.

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.

P260 Do not breathe gas.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P405 Store locked up.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

2.3 Other hazards:

CLP

Heat may cause pressure rise in tanks/drums: explosion risk

May cause frostbites

Harmful to aquatic organisms

SECTION 3: Composition/information on ingredients

3.1 Substances:

	CAS No EC No	Conc (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
sulphur dioxide	7446-09-5	C>99 %	T; R23	Press. Gas - Liquefied gas;	(1)(2)	Mono-constituent
01-2119485028-34	231-195-2		C; R34	H280		
				Acute Tox. 3; H331		
				Skin Corr. 1B; H314		

⁽¹⁾ For R-phrases and H-statements in full: see heading 16

3.2 Mixtures:

Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Immediately consult a doctor/medical service.

After skin contact

Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

After eve contact:

Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.

After ingestion:

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Not applicable.

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

4.2.1 Acute symptoms

After inhalation:

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⁽²⁾ Substance with a Community workplace exposure limit

Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Lacrimation. Nausea. Gastrointestinal complaints. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible oedema of the upper respiratory tract. Possible laryngeal spasm/oedema. Risk of lung oedema. Respiratory difficulties.

After skin contact:

Caustic burns/corrosion of the skin.

After eye contact:

Corrosion of the eye tissue. Permanent eye damage.

After ingestion:

Not applicable.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Adapt extinguishing media to the environment.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

Reacts with water (moisture): release of corrosive products. Reacts on exposure to water (moisture) with (some) metals. In moist air: release of corrosive mist (sulphuric acid vapours).

5.3 Advice for firefighters:

5.3.1 Instructions:

Cool tanks/drums with water spray/remove them into safety. Physical explosion risk: cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gas-tight suit. Corrosion-proof suit. Compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Keep upwind. Seal off low-lying areas. Close doors and windows of adjacent premises. No naked flames. Corrosion-proof appliances. Avoid ingress of water in the containers.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gas-tight suit. Corrosion-proof suit.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Tip the container on one side to stop the leakage. Try to reduce evaporation. Take account of toxic/corrosive precipitation water. Prevent spreading in sewers. Prevent soil and water pollution.

6.3 Methods and material for containment and cleaning up:

Take up liquid spill into absorbent material, e.g.: dry sand/earth or powdered limestone. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Keep away from naked flames/heat. Avoid contact of substance with water. Gas/vapour heavier than air at 20°C. Observe strict hygiene. Remove contaminated clothing immediately. Use corrosionproof equipment.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store in a cool area. Store in a dry area. Ventilation at floor level. Fireproof storeroom. Keep locked up. Provide for a cooling system. Provide for a tub to collect spills. Unauthorized persons are not admitted. Meet the legal requirements.

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7.2.2 Keep away from:

Heat sources, combustible materials, oxidizing agents, highly flammable materials, halogens, water/moisture.

7.2.3 Suitable packaging material:

Steel, stainless steel, carbon steel, lead, aluminium, iron, copper, bronze, glass.

7.2.4 Non suitable packaging material:

7inc.

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

The Netherlands

Zwaveldioxide	Short time value (Public occupational exposure limit value)	0.26 ppm	
	Short time value (Public occupational exposure limit value)	0.7 mg/m³	
	value)		

Belgium

Soufre (dioxyde de)	Time-weighted average exposure limit 8 h	2 ppm	
	Time-weighted average exposure limit 8 h	5.3 mg/m³	
	Short time value	5 ppm	
	Short time value	13 mg/m³	

USA (TLV-ACGIH)

Sulfur dioxide	0.25 ppm	

Germany

Schwefeldioxid	Time-weighted average exposure limit 8 h (TRGS 900)	1 ppm	
	Time-weighted average exposure limit 8 h (TRGS 900)	2.5 mg/m³	

France

Soufre (dioxyde de)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	2 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	5 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	5 ppm
	Short time value (VL: Valeur non réglementaire indicative)	10 mg/m³

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Sulfur Dioxide (organic and inorganic gases by Extractive FT	NIOSH	3800
Sulfur Dioxide	NIOSH	6004
Sulfur Dioxide	OSHA	1011
Sulfur Dioxide	OSHA	ID 104
Sulfur Dioxide	OSHA	ID 200

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL - Workers

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sulfur dioxide, liquefied, under pressure

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Acute local effects inhalation	2.7 mg/m ³	
	Long-term local effects inhalation	1.3 mg/m³	

DNEL - General population

sulfur dioxide, liquefied, under pressure

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term local effects inhalation	0.53 mg/m ³	

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8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Avoid contact of substance with water. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. Do not eat, drink or smoke during work.

a) Respiratory protection:

Gas mask with filter type E at conc. in air > exposure limit. High vapour/gas concentration: self-contained respirator.

b) Hand protection:

Insulated gloves.

- materials (good resistance)

Butyl rubber, chlorinated polyethylene, tetrafluoroethylene.

- materials (poor resistance)

Chloroprene rubber, polyethylene.

c) Eye protection:

Protective goggles.

d) Skin protection:

Head/neck protection. Corrosion-proof clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Liquefied gas
Odour	Irritating/pungent odour
	Asphyxiating odour
Odour threshold	1 - 5 ppm
Colour	Colourless
Particle size	Not applicable (gas)
Explosion limits	Not applicable
Flammability	Non combustible
Log Kow	-2.20 ; QSAR
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	-75.50 °C
Boiling point	-10. °C ; 1013 hPa
Flash point	Not applicable
Evaporation rate	No data available
Relative vapour density	2.3
Vapour pressure	3271 hPa; 20 ℃
Solubility	ethanol ; 25 g/100 ml
	water ; 11.4 g/100 ml ; 20 °C
	ether ; soluble
	acetone ; soluble
	chloroform ; soluble
	methanol ; soluble
	sulfuric acid ; soluble
	acetic acid ; soluble
Relative density	2.51 ; 25 °C
	1.43 ; 0 °C
	1.46 ; -75.5 °C
Decomposition temperature	> 2000 °C
Auto-ignition temperature	Not applicable
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	0.78 ; 11.4 g/100 ml ; 20 °C

9.2 Other information:

Minimum ignition energy	Not applicable	
Specific conductivity	8 μS/m	
Critical temperature	157 °C	
	158 °C	
Critical pressure	78840 hPa	

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Surface tension	0.02 N/m ; -10 °C	
Absolute density	1462 kg/m³ ; -10 °C	

SECTION 10: Stability and reactivity

10.1 Reactivity:

Substance has acid reaction.

10.2 Chemical stability:

Unstable on exposure to moisture.

10.3 Possibility of hazardous reactions:

Reacts with water (moisture): release of corrosive products. Reacts on exposure to water (moisture) with (some) metals. Reacts violently with (strong) oxidizers, with (some) halogens, amines and with (some) bases: (increased) risk of fire/explosion. Reacts violently with (some) compounds: peroxidation resulting in increased fire or explosion risk.

10.4 Conditions to avoid:

Keep away from naked flames/heat. Avoid contact of substance with water.

10.5 Incompatible materials:

Combustible materials, oxidizing agents, highly flammable materials, halogens, water/moisture.

10.6 Hazardous decomposition products:

In moist air: release of corrosive mist (sulphuric acid vapours).

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

sulfur dioxide, liquefied, under pressure

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral						Data waiving	
Dermal						Data waiving	
Inhalation (aerosol)	LC0		>400 ppm	2 h	Dog (male/female)	Experimental value	

As the substance is a gas, inhalation is the most appropriate route of exposure

Conclusion

Toxic if inhaled.

Corrosion/irritation

sulfur dioxide, liquefied, under pressure

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Irritating		1(10 ppm) h		Rat	Experimental value	
Skin	Irritating		1 (10ppm) h		Rat	Experimental value	
Inhalation (gases)	Irritating		2 (23 ppm)		Rat	Experimental value	

The liquid form can cause frostbites, typical for all liquified gases

Conclusion

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

sulfur dioxide, liquefied, under pressure

Route of exposure	Result	Method	•	Observation time point	Species	Value determination	Remark
Skin						Data waiving	
(0,	Limited positive		5 (0.1 ppm) days		Guinea pig (male)	Experimental value	
	test result		(5h/day)				

The study on skin sensitisation does not need to be conducted as the substance is a gas

Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

Specific target organ toxicity

sulfur dioxide, liquefied, under pressure

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	 Value determination
Oral							Data waiving

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Dermal							Data waiving
Inhalation	NOAEL	Subchronic	>5 ppm	No effect	4 weeks (5	Rat (male/female)	Experimental value
		toxicity test			days/week)		

As the substance is a gas, inhalation is the most appropriate route of exposure

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

sulfur dioxide, liquefied, under pressure

Result	Method	Test substrate	Effect	Value determination
Negative without metabolic		Rat liver cells	No effect	Experimental value
activation				

Mutagenicity (in vivo)

sulfur dioxide, liquefied, under pressure

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474	7 day(s)	Mouse (male/female)		Experimental value

Carcinogenicity

sulfur dioxide, liquefied, under pressure

	Parameter	Method	Value	Exposure time			Organ	Effect
exposure						determination		
Inhalation	LOAEC	Not further	10 ppm	21 weeks (6h/day, 5	Rat	Experimental		Lesions in larynx,
(gases)		determined		days/week)	(male/female)	value		trachea and lung

Reproductive toxicity

sulfur dioxide, liquefied, under pressure

	Parameter	Method	Value	Exposure time	Species	Effect	- 0-	Value determination
Developmental toxicity	LOAEC			0-14 days (gestation, daily)		neurotoxic effects		Experimental value
Effects on fertility	1	Equivalent to OECD 416	30 ppm	, (. ,		No adverse systemic effects		Experimental value

Conclusion CMR

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

sulfur dioxide, liquefied, under pressure

No (test)data available

Chronic effects from short and long-term exposure

sulfur dioxide, liquefied, under pressure

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Feeling of weakness. Possible inflammation of the respiratory tract. Nosebleeding. Inflammation/affection of the gums. Affection/discolouration of the teeth. Respiratory difficulties.

SECTION 12: Ecological information

12.1 Toxicity:

sulfur dioxide, liquefied, under pressure

No (test)data available

Conclusion

Harmful to aquatic organisms

pH shift

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2 Persistence and degradability:

sulfur dioxide, liquefied, under pressure

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
			Not applicable (gas)

Half-life air (t1/2 air)

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Method		Primary degradation/mineralisation	Value determination
	0.178 day(s)	Primary degradation	QSAR

Conclusion

Biodegradability: not applicable

12.3 Bioaccumulative potential:

sulfur dioxide, liquefied, under pressure

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		3.16			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
		-2.20		QSAR

Conclusion

Low potential for bioaccumulation (BCF < 500)

12.4 Mobility in soil:

Not applicable (gas)

12.5 Results of PBT and vPvB assessment:

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances.

12.6 Other adverse effects:

sulfur dioxide, liquefied, under pressure

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

16 05 04* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Refer to manufacturer/supplier for information on recovery/ recycling. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1 UN number:			
UN number	1079		
14.2 UN proper shipping name:			
Proper shipping name	Sulphur dioxide		
14.3 Transport hazard class(es):			
Hazard identification number	268		
Class	2		
Classification code	2TC		
14.4 Packing group:			
Packing group			
Labels	2.3+8		
14.5 Environmental hazards:			
Environmentally hazardous substance mark	no		
14.6 Special precautions for user:			
Special provisions			

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Limited quantities	none.
ail (RID)	
14.1 UN number:	4070
UN number	1079
14.2 UN proper shipping name:	Collabora disorida
Proper shipping name	Sulphur dioxide
14.3 Transport hazard class(es): Hazard identification number	268
	208
Class Classification code	
	2TC
14.4 Packing group:	
Packing group Labels	2.3+8 (+13)
14.5 Environmental hazards:	2.3+0 (+13)
Environmentally hazardous substance mark	no
14.6 Special precautions for user:	lio
Special provisions	
Limited quantities	none
<u> </u>	none.
lland waterways (ADN) 14.1 UN number:	
UN number	1079
14.2 UN proper shipping name:	12073
Proper shipping name	Sulphur dioxide
14.3 Transport hazard class(es):	Sulphiul dioxide
Class	2
Classification code	2TC
14.4 Packing group:	210
Packing group	
Labels	2.3+8
14.5 Environmental hazards:	2.3.0
Environmentally hazardous substance mark	lno
	iio
14.6 Special precautions for user:	
Special provisions	none
Special provisions Limited quantities	none.
Special provisions	none.
Special provisions Limited quantities	none.
Special provisions Limited quantities ea (IMDG/IMSBC)	none.
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number:	1079
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Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group	Sulphur dioxide 2.3
Special provisions Limited quantities 2a (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group:	1079 Sulphur dioxide
Special provisions Limited quantities 2a (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards:	Sulphur dioxide 2.3
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Marine pollutant	1079
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards:	Sulphur dioxide 2.3
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Marine pollutant	1079
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Marine pollutant Environmentally hazardous substance mark 14.6 Special precautions for user: Special provisions	1079
Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Marine pollutant Environmentally hazardous substance mark 14.6 Special precautions for user:	1079
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Special provisions Limited quantities ea (IMDG/IMSBC) 14.1 UN number: UN number 14.2 UN proper shipping name: Proper shipping name 14.3 Transport hazard class(es): Class 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Marine pollutant Environmentally hazardous substance mark 14.6 Special precautions for user: Special provisions Limited quantities	1079
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14.6 Special precautions for user:

┯.,	o Special precautions for user.				
	Special provisions	A2			
	Passenger and cargo transport: limited quantities: maximum net quantity				
	per packaging				

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
	Not applicable (inorganic)

National legislation The Netherlands

Waste identification (the	LWCA (the Netherlands): KGA category 06
Netherlands)	
Waterbezwaarlijkheid	9

National legislation Germany

Schwangerschaft Gruppe	c
WGK	1; Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July
	2005 (Anhang 2)
TA-Luft	5.2.4; IV

National legislation France

No data available

National legislation Belgium

No data available

Other relevant data

TLV - Carcinogen	Sulfur dioxide; A4
IARC - classification	3; Sulfur dioxide and some sulfites, bisulfites and metabisulfites

15.2 Chemical safety assessment:

A chemical safety assessment has been performed.

SECTION 16: Other information

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Enumerated in substance list Annex I of Directive 67/548/EEC et sequens

Labels



Toxio

R-phrases

Toxic by inhalationCauses burns

S-phrases

(01/02) (Keep locked up and out of the reach of children)
09 Keep container in a well-ventilated place

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

36/37/39 Wear suitable protective clothing gloves, and eye/face protection

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Full text of any R-phrases referred to under headings 2 and 3:

R23 Toxic by inhalation

R34 Causes burns

Full text of any H-statements referred to under headings 2 and 3:

H280 Contains gas under pressure; may explode if heated.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive
DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Specific concentration limits DSD

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sulphur dioxide	C ≥ 20 %	T; R23	DSD Annex VI (ATP 0)
	5 % < C < 20 %	Xn: R20	DSD Annex VI (ATP 0)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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