

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	: sulphur dioxide; sulfur dioxide; bisulfite, liquefied, under pressure; dioxide of sulfur, liquefied, under pressure; fermenicide; soufre dioxide, liquefied, under pressure; sulfur oxide, liquefied, under pressure; sulfur superoxide, liquefied, under pressure; sulfurous acid anhydride, liquefied, under pressure; sulfurous acid, liquefied, under pressure; sulfurous anhydride, liquefied, under pressure; sulfurous oxide, liquefied, under pressure
Product type REACH	: Substance/mono-constituent (Inorganic)
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	: SO ₂

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 SDS

CHEMOGAS NV
Westvaardijk 85
B-1850 Grimbergen Belgium
Tel: +32 2 251 60 87
Fax: +32 2 252 17 51
info@chemogas.com

Distributor of the substance

CHEMOGAS NV
Westvaardijk 85
B-1850 Grimbergen Belgium
Tel: +32 2 251 60 87
Fax: +32 2 252 17 51
info@chemogas.com

1.4 Emergency telephone number:

24h/24h: +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 statement code(s)
Press. Gas	Liquefied gas	H280: Contains gas under pressure; may explode if heated.
Acute Tox.	category 3	H311: Toxic in contact with skin.
Skin Corr.	category 1B	H314: Causes severe skin burns and eye damage.

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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)

Hazard pictograms



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 dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

+ P353

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

+ P338

2.3 Other hazards:

CLP

Substance does not meet the screening criteria for persistency nor bioaccumulation so is neither PBT nor vPvB

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

May cause frostbites

SECTION 3: Composition/information on ingredients

3.1 Substances:

Name (REACH Registration No)	CAS No EC No	Conc.	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
sulphur dioxide	7446-09-5 231-195-2		T; R23 C; R34	Press. Gas - Liquefied gas; H280 Acute Tox. 3; H311 Skin Corr. 1B; H314	(1)(2)(8)	Mono-constituent

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

(2) Substance with a Community workplace exposure limit

(8) Specific concentration limits, 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:

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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 eye contact:

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

After ingestion:

Not applicable.

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

4.2.1 Acute symptoms

After inhalation:

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:

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

5.3.2 Special protective equipment for fire-fighters:

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

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:

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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. Meet the legal requirements. Unauthorized persons are not admitted.

7.2.2 Keep away from:

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:

Zinc.

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.

Regulatory exposure limit (The Netherlands)

Zwavel dioxide	Short time value	0.7 mg/m ³	
	Short time value, calculated	0.26 ppm	

Limit Value (Belgium)

Soufre (dioxyde de)	Short time value	5 ppm 13 mg/m ³	
	Time-weighted average exposure limit 8 h	2 ppm 5.3 mg/m ³	

TLV (USA)

Sulfur dioxide	Short time value	0.25 ppm	
	Time-weighted average exposure limit 8 h	-	

Limit Value (France)

Soufre(dioxyde de)	Short time value	5 ppm 10 mg/m ³	
	Time-weighted average exposure limit 8 h	2 ppm 5 mg/m ³	

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 (using prefilter)	OSHA	ID 200
Sulfur Dioxide (organic and inorganic gases by Extractive FT)	NIOSH	3800
Sulfur Dioxide	OSHA	ID 104
Sulfur Dioxide	OSHA	ID 200
Sulfur Dioxide	NIOSH	6004

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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

Workers

sulfur dioxide, liquefied, under pressure

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

General population

sulfur dioxide, liquefied, under pressure

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

PNEC

sulfur dioxide, liquefied, under pressure

Compartments	Value	Remark
	No data available	

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.

b) Hand protection:

Insulated gloves.

- materials for protective clothing (good resistance)

Butyl rubber, chlorinated polyethylene, tetrafluoroethylene.

- materials for protective clothing (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	Gas
Odour	Irritating/pungent odour
	Asphyxiating odour
Odour threshold	1 - 5 ppm
Colour	Colourless
Particle size	Not applicable (gas)
Explosion limits	No data available
Flammability	Non combustible
Log Kow	-2.20
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	-75.48 °C
Boiling point	-10.02 °C ; 1013.25 hPa
Flash point	No data available
Evaporation rate	No data available
Vapour pressure	3271 hPa ; 20 °C

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Relative vapour density	2.3
Solubility	water ; 11 g/100 ml
	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
pH	0.78 ; 11.4 g/100 ml ; 20 °C

Physical hazards

Gas under pressure

9.2 Other information:

Minimum ignition energy	Not applicable
Specific conductivity	8 µS/m
Surface tension	0.02 N/m ; -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, zinc.

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

	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Inhalation (aerosol)	LC0		>400 ppm	2 h	Dog	Male/female	Experimental value
Inhalation (gases)	LC100		1975 ppm	198 minutes	Rat	Male/female	Experimental value
Inhalation (gases)	LC100		3498 ppm	72 minutes	Rat	Male/female	Experimental value

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Inhalation (gases)	LOAEL		20 mg/l	120 minutes	Rat	Female	Weight of evidence
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Conclusion

Toxic if inhaled.

Corrosion/irritation

sulfur dioxide, liquefied, under pressure

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

Conclusion

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

sulfur dioxide, liquefied, under pressure

	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Inhalation (gases)	Sensitizing		5 (0.1 ppm) day(s)		Guinea pig	Male	Experimental value

Conclusion

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific target organ toxicity

sulfur dioxide, liquefied, under pressure

	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Inhalation	NOAEL		5 ppm		No effect	5 weeks (5 days/ week)	Rat	Male/ female	Experimental value

Conclusion

Supplementary classification for repeated dose toxicity was not considered necessary

Mutagenicity (in vitro)

sulfur dioxide, liquefied, under pressure

Result	Method	Test substrate	Effect	Value determination
Negative		Rat liver cells		Experimental value

Mutagenicity (in vivo)

sulfur dioxide, liquefied, under pressure

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	OECD 474: Mammalian Erythrocyte Micronucleus Test	7 day(s)	Mouse	Male/female		Experimental value

Carcinogenicity

sulfur dioxide, liquefied, under pressure

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination	Organ	Effect
Inhalation (gases)	LOAEC		10 ppm	21 weeks (6h/ day, 5 days/ week)	Rat	Male/female	Experimental value		Lesions in larynx, trachea and lung

Reproductive toxicity

sulfur dioxide, liquefied, under pressure

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Effects on fertility	NOAEL	Equivalent or similar to OECD 416	30 ppm	24 day(s)	Mouse	Male/ female	No adverse systemic effects		Experimental value

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Developmental toxicity	LOAEC		5 ppm	0-14 days (gestation, daily)	Mouse		No adverse systemic effects		Experimental value
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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 data available

Conclusion

No data available

SECTION 12: Ecological information

12.1 Toxicity:

sulfur dioxide, liquefied, under pressure

No data available

Conclusion

pH shift
 Insufficient data available on ecotoxicity

12.2 Persistence and degradability:

sulfur dioxide, liquefied, under pressure

Half-life air (t1/2 air)

Method	Value	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	Value	Temperature	Value determination
	-2.20		QSAR

Conclusion

Low potential for bioaccumulation (Log Kow < 4)

12.4 Mobility in soil:

sulfur dioxide, liquefied, under pressure

Mobility soil (log Poc)

Parameter	Method	Value	Value determination
log Koc		0.476	QSAR

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.00081 atm m ³ /mol		25 °C		Experimental value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay Level III	0.271 %		0.0814 %	50.8 %	48.9 %	QSAR

Volatile organic compounds (VOC)	Not applicable
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Soluble in water

12.5 Results of PBT and vPvB assessment:

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Substance does not meet the screening criteria for persistency nor bioaccumulation so is neither PBT nor vPvB.

12.6 Other adverse effects:

sulfur dioxide, liquefied, under pressure

Global warming potential (GWP)

No data available

Ozone-depleting potential (ODP)

Ozone layer	Not dangerous for the ozone layer (Council Regulation (EC) no 1005/2009)
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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 2001/118/EC).

16 05 04* (gases in pressure containers (including halons) containing dangerous substances). 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
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14.2 UN proper shipping name:

Proper shipping name	Sulphur dioxide
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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
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14.6 Special precautions for user:

Special provisions	
Limited quantities	none.

Rail (RID)

14.1 UN number:

UN number	1079
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14.2 UN proper shipping name:

Proper shipping name	Sulphur dioxide
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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 (+ 13)

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
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Limited quantities	none.
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Inland waterways (ADN)

14.1 UN number:	
UN number	1079
14.2 UN proper shipping name:	
Proper shipping name	Sulphur dioxide
14.3 Transport hazard class(es):	
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	
Limited quantities	none.

Sea (IMDG)

14.1 UN number:	
UN number	1079
14.2 UN proper shipping name:	
Proper shipping name	Sulphur dioxide
14.3 Transport hazard class(es):	
Class	2.3
14.4 Packing group:	
Labels	2.3 + 8
14.5 Environmental hazards:	
Marine pollutant	-
Environmentally hazardous substance mark	no
14.6 Special precautions for user:	
Special provisions	
Limited quantities	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	
Annex II of MARPOL 73/78	

Air (ICAO-TI/IATA-DGR)

14.1 UN number:	
Transport	Forbidden
UN number	1079
14.2 UN proper shipping name:	
Proper shipping name	Sulphur dioxide
14.3 Transport hazard class(es):	
Class	2.3
14.4 Packing group:	
Packing group	
Labels	
14.5 Environmental hazards:	
Environmentally hazardous substance mark	no
14.6 Special precautions for user:	
Special provisions	A2
Cargo transport: maximum net quantity per packaging	Forbidden
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	Forbidden

SECTION 15: Regulatory information

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

National legislation

- The Netherlands

Waterbezwaarlijkheid (for NL)	9
Waste identification other lists of waste materials	LWCA (the Netherlands): KGA category 06

- Germany

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Classification water polluting in compliance with
Verwaltungsvorschrift wassergefährdender Stoffe
(VwVwS) of 27 July 2005 (Anhang 2)

15.2 Chemical safety assessment:

No chemical safety assessment has been conducted.

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



T

R-phrases

- 23 Toxic by inhalation
34 Causes 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
45 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.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.

(*) = 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

sulphur dioxide	C >= 20 %	T;R 23-34
	5 % <= C < 20 %	C;R 20-34
	0,5 % <= C < 5 %	Xi;R 36/37/38

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. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult your BIG licence agreement for details.

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