Section 1. Identification

Product identifier

Product Identity Sulfur Dioxide (CHE-1021S)

Other means of identification Not Applicable

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

Used as a bleaching agent, refrigerant, solvent and in various process applications.

Details of the supplier of the safety data sheet

Company Name

Chemtrade Logistics Inc. (Canada)
155 Gordon Baker Road Suite 300
Toronto, Ontario M2H 3N5
(416) 496-5856

Chemtrade Logistics Inc. (US)
90 East Halsey Road, Suite 200
Parsippany, NJ 07054
(800) 228- 8558

Emergency

24 hour Emergency Telephone No.

Chemtrade Emergency Contact: (866) 416-4404 (US and Canada)
CHEMTREC +1-800-424-9300
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

Customer Service:

For SDS Info: (416) 496-5856
www.chemtradelogistics.com

Section 2. Hazard(s) identification

Classification of the substance or mixture

Gas under pressure;H280	Contains gas under pressure; may explode if heated.
Acute toxicity(inhalation), category 3;H331	Toxic if inhaled.
Skin corrosion/irritation category 1B;H314	Causes severe skin burns and eye damage.
Serious eye damage / eye irritation, category 1;H318	Causes serious eye damage.

Specific target organ toxicity, Single exposure category 1;H370	Causes damage to organs. Specific Target Organs: (respiratory system (by inhalation))

Label elements

Danger

H280 Contains gas under pressure; may explode if heated.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H370 Causes damage to organs.

[Prevention]:
P233 Keep container tightly closed.
P260 Do not breathe dust, fume, mist, vapors or spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection, face protection.
[Response]:
P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+311 If exposed or concerned: Call a POISON CENTER or doctor, physician.
P310 Immediately call a POISON CENTER, doctor or physician.
P311 Call a POISON CENTER or doctor, physician.
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
[Storage]:
P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+403 Protect from sunlight. Store in a well ventilated place.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does NOT contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per the US EPA PFASMASTER combined list of PFAS chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Sulfur dioxide **CAS Number: 7446-09-5** **Synonyms: No available information**	**80 - 100**	**Gas under pressure;H280** **Acute toxicity(inhalation), category 3;H331** **Skin corrosion/irritation category 1B;H314** **Serious eye damage / eye irritation, category 1;H318** **Specific target organ toxicity, Single exposure category 1;H370**	**No data available**

The actual concentration or concentration range is withheld as a trade secret.
*PBT/vPvB - PBT, vPvM or vPvB-substance.
The full texts of the phrases are shown in Section 16.

The specific chemical identity and/or exact percentage of composition are withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Section 4. First aid measures

Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 30 minutes, holding the eyelids apart and seek medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Drench affected area with water for at least 30 minutes. Obtain medical attention if irritation develops or persists.

Ingestion If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Overview Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause frostbite on contact with the liquid.

Acute Health Effects: Toxic if inhaled. Causes severe kin burns and eye damage. May cause frostbite on contact with the liquid.

EYE: Causes eye irritation. Causes permanent damage to the cornea, iris, or conjunctiva. Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.

SKIN: Causes severe irritation which will progress to chemical burns. Contact with gas/liquid escaping the container can cause frostbite and freeze burns.

INHALATION: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death.

INGESTION: Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.

See section 2 for further details.

Inhalation Toxic if inhaled. Causes damage to organs.

Eyes Causes serious eye damage.

Skin Causes severe skin burns and eye damage.

Chronic effects Prolonged exposure to gas or overexposure to concentrated gas may cause loss of consciousness, possible damage to lung tissue, a decrease of lung function, vocal cord spasms, chemical pneumonia, inflammation of the throat (bronchitis), and breathing paralysis.

Section 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Do not use water jet, or heavy water stream. Use of heavy stream of water may spread fire.

Special hazards arising from the substance or mixture

Hazardous decomposition: Does not decompose but will react with water or steam to produce corrosive sulfurous acid.

Keep container tightly closed.

Do not breathe dust, fume, mist, vapors or spray.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean up immediately after fire. No smoking.

Fire Hazard: Product is not considered flammable.

Explosion Hazard: Container may explode in heat of fire.

Firefighting Instructions: Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. **Exercise caution when fighting any chemical fire.** Under fire conditions, hazardous fumes will be present.

Hazardous reactions Will not occur under normal conditions.

Hazardous Combustion Products: Not available.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

ERG Guide No. 125

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General Measures: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See Section 8.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Prevent entry to sewers and public waters. Avoid release to environment.

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Methods and material for containment and cleaning up

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Contact competent authorities after a spill.

Stop leak, if possible, without risk. As an immediate precautionary measure, isolate spill or leak area in all directions.

Equip cleanup crew with proper protection.

Section 7. Handling and storage

Precautions for safe handling

Store containers in a well-ventilated location. Keep containers tightly closed when not in use. Store locked up.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Technical Measures: Comply with applicable regulations.

Incompatible materials: Strong bases, halogens, metals, ammonia, oxidizing agents, chlorates, metal oxides, hydrides, azides, sodium carbide, and acrolein

See section 2 for further details. - [Storage]:

Specific end use(s)

Used as a bleaching agent, refrigerant, solvent and in various process applications.

Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
7446-09-5	Sulfur dioxide	ACGIH	0.25 ppm
		OSHA	5 ppm, 13 mg/m^3
		NIOSH	TWA 2 ppm (5 mg/m^3) STEL: 5 ppm (13 mg/m^3)
		Alberta	2 ppm TWA; 5.2 mg/m^3 TWA 5 ppm STEL; 13 mg/m^3 STEL
		British Columbia	2 ppm TWA 5 ppm STEL
		Manitoba	0.25 ppm STEL
		New Brunswick	2 ppm TWA; 5.2 mg/m^3 TWA 5 ppm STEL; 13 mg/m^3 STEL

		Newfoundland and Labrador	0.25 ppm STEL
		Nova Scotia	0.25 ppm STEL
		Northwest Territories	2 ppm TWA 5 ppm STEL
		Nunavut	2 ppm TWA 5 ppm STEL
		Ontario	2 ppm TWA; 5.2 mg/m^3 TWA 5 ppm STEL; 10.4 mg/m^3 STEL
		Prince Edward Island	0.25 ppm STEL
		Quebec	2 ppm TWAEV; 5.2 mg/m^3 TWAEV 5 ppm STEV; 13 mg/m^3 STEV
		Saskatchewan	2 ppm TWA 5 ppm STEL
		Yukon	5 ppm TWA; 13 mg/m^3 TWA 5 ppm STEL; 13 mg/m^3 STEL

Exposure controls

Respiratory If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Eyes Chemical safety goggles and face shield. Where higher splash potential exists (e.g. line breaking), wear SCBA. Eye wash fountains are required.

Skin Wear chemical resistant gloves such as Neoprene Butyl Rubber gloves. Skin contact with liquified gas may cause frostbite, use suitable protection. Wear chemical resistant clothing. **Where higher splash potential exists** (e.g. loading, unloading, line breaking, sampling of product), wear hard hat and chemical splash shroud, Chemical resistant jacket and pants or bib overalls: PVC, neoprene, PVC coated polyester, or polyester trilaminate gore.

Engineering Controls **Exposure Controls Appropriate Engineering Controls:** Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Other Work Practices Put on appropriate personal protective equipment. Chemically compatible gloves, protective clothing, and chemical resistant safety goggles. Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.
Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).
Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Gas
Color	Colorless
Odor	Strong pungent
Odor threshold	No available information
Melting point / freezing point	-75.55 °C (-103.99 °F)
Initial boiling point and boiling range	-9.99 °C (14.02 °F)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	No available information
Auto-ignition temperature	No available information
Decomposition temperature	No available information
pH	Not applicable. In water, sulfur dioxide is rapidly converted to sulfurous acid (pH less than 3)
Viscosity (cSt)	No available information
Solubility in Water	Water: 11.9% by wt. in water at 15°C (60°F) and 760 mmHg. Organic solvent: Soluble in alcohol, chloroform, ether, acetic acid.
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapour pressure (Pa)	No available information
Relative Density	No available information
Vapour Density	2.2 [Air = 1] @20C
Evaporation rate (Ether = 1)	243.2
	Contains gas under pressure; may explode if heated
Specific Gravity	1.437 @ 0°C (32°F)
Critical Temperature	156.9 °C (314.42 °F)

Other information

No other relevant information.

Section 10. Stability and reactivity

Reactivity

Contact with water/moisture may produce toxic and corrosive fumes. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Chemical stability

Contains gas under pressure; may explode if heated.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Extremely high or low temperatures and incompatible materials. Ignition sources. Incompatible materials. Water, humidity.

Incompatible materials

Strong bases, halogens, metals, ammonia, oxidizing agents, chlorates, metal oxides, hydrides, azides, sodium carbide, and acrolein

Hazardous decomposition products

Does not decompose but will react with water or steam to produce corrosive sulfurous acid.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Product Acute Toxicity Estimates	NA	NA	NA	NA	1,000

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Sulfur dioxide - (7446-09-5)	No data available.	No data available.	No data available.	No data available.	1,000.00, Mouse - Category: 3

Carcinogen Data

CAS No.	Ingredient	Source	Value
7446-09-5	Sulfur dioxide	IARC	Group 3
		ACGIH	A4

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable

Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	1	Causes damage to organs.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:
Inhalation, ingestion, skin contact, and skin absorption.

Symptoms and effects, both acute and delayed:
Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause frostbite on contact with the liquid.

Acute Health Effects: Toxic if inhaled. Causes severe kin burns and eye damage. May cause frostbite on contact with the liquid.

EYE: Causes eye irritation. Causes permanent damage to the cornea, iris, or conjunctiva. Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.

SKIN: Causes severe irritation which will progress to chemical burns. Contact with gas/liquid escaping the container can cause frostbite and freeze burns.

INHALATION: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death.

INGESTION: Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.

Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.
Chronic effects	Prolonged exposure to gas or overexposure to concentrated gas may cause loss of consciousness, possible damage to lung tissue, a decrease of lung function, vocal cord spasms, chemical pneumonia, inflammation of the throat (bronchitis), and breathing paralysis.

Section 12. Ecological information

Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Sulfur dioxide - (7446-09-5)	No data available.	No data available.	500.00, Algae

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations

Waste treatment methods

Dispose of waste material in accordance with all local, regional, federal, provincial, state, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

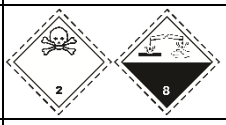
Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

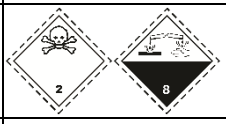
Section 14. Transport information

Classification Method: Classified as per Part 2, Sections 2.1-2.8 of the Transportation of Dangerous Goods Regulations.

DOT (Domestic Surface Transportation)	
UN number	UN1079
UN proper shipping name	UN1079,Sulfur dioxide,2.3, (8)
	
Transport hazard class(es)	2.3
Sub Class	8

Packing group	Not Applicable

TDG (Domestic Surface Transportation)	
UN number	UN1079
UN proper shipping name	UN1079,Sulfur dioxide,2.3, (8)
	
Transport hazard class(es)	2.3
Sub Class	8
Packing group	Not Applicable

IMO / IMDG (Ocean Transportation)	
UN number	UN1079
UN proper shipping name	UN1079,Sulfur dioxide,2.3, (8)
	
Transport hazard class(es)	2.3
Sub Class	8
Packing group	Not Applicable

ICAO/IATA	
UN number	UN1079
UN proper shipping name	UN1079,Sulfur dioxide,2.3, (8)
Transport hazard class(es)	2.3
Sub Class	8
Packing group	Not Applicable

Environmental hazards

IMDG Marine Pollutant: No;

Special precautions for user

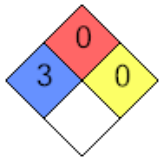
No available information

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

NFPA Ranking
Health (blue) :3
Fire (red) :0
Reactivity (yellow) :0
Special (white) :--



Toxic Substance Control Act (TSCA)

Sulfur dioxide

CERCLA Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

Sulfur dioxide

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Canadian Domestic Substance List (DSL):

Sulfur dioxide

Canadian Non-Domestic Substance List (NDSL):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Sulfur dioxide

Pennsylvania RTK Substances (>1%):

Sulfur dioxide

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

Sulfur dioxide

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

WARNING: This product can expose you to chemicals including [Sulfur dioxide], which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS Number)	US TSCA	Australia AICS	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Sulfur dioxide (7446-09-5)	Yes	Yes	Yes	Yes	No	No	No	Yes

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Sulfur dioxide (7446-09-5)	Yes	Yes	Yes	No	No	No	Yes	Yes

Section 16. Other information

Revision Date 11/06/2025

Revision Number 4

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H280 Contains gas under pressure; may explode if heated.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H370 Causes damage to organs.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document