

# Safety Data Sheet

## Sulfur Dioxide

**United States Cylinder Gas**  
11618 S Mayfield Ave, Alsip, Illinois, 60803  
Emergency Phone: CHEMTREC 1-800-424-9300  
www.uscylgas.com

### Section 1: Product and Company Identification

**United States Cylinder Gas**  
11618 S Mayfield Ave, Alsip, Illinois, 60803  
(708) 389-1402  
Emergency Phone: CHEMTREC 1-800-424-9300  
www.uscylgas.com

Product Code: **Sulfur Dioxide**

Part Number: SO2 150# ANHY

**Synonyms:** SO2

**Recommended Use:** Industrial use. Use as directed.

**Usage Restrictions:**

### Section 2: Hazards Identification



**Hazard Classification:** Acute Gas Inhale Toxicity (Category 3), H331  
Acute Vapor Inhale Toxicity (Category 3), H331  
Eye Effects (Category 1), H318  
Gases Under Pressure, H280  
Skin Corrosion (Category 1.C), H314

**Hazard Statements:** H331: Toxic if inhaled  
H331: Toxic if inhaled  
H318: Causes serious eye damage  
H280: Contains gas under pressure; may explode if heated  
H314: Causes severe skin burns and eye damage  
CGA-HG22: CORROSIVE TO THE RESPIRATORY TRACT.

**Precautionary Statements**

P202: Do not handle until all safety precautions have been read and understood.  
P260: Do not breathe gas.  
P264: Wash hands thoroughly after handling.  
P271+P403: Use and store only outdoors or in a well-ventilated place.  
P280: Wear protective gloves, protective clothing, eye protection, and/or face protection.  
P405: Store locked up.  
P501: Dispose of contents/container in accordance with container/supplier owner instructions.  
CGA-PG02: Protect from sunlight when ambient temperature exceeds 52C (125F).

CGA-PG05: Use a back flow preventive device in the piping.  
CGA-PG06: Close valve after each use and when empty.  
CGA-PG10+CGA-PG20: Use only with equipment of compatible materials of construction and rated for cylinder pressure.  
CGA-PG12: Do not open valve until connected to equipment prepared for use.  
CGA-PG27: Read and follow the Safety Data Sheet (SDS) before use.

### Section 3: Composition/Information on Ingredients

	CAS #	Concentration
Sulfur Dioxide	7446-09-5	100%

	Trade Names
Sulfur Dioxide	Sulfur dioxide sulphur dioxide Sulfurous anhydride Sulfurous oxide Sulfur superoxide Fermenicide liquid

### Section 4: First Aid Measures

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower]. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. Immediately call a POISON CENTER or doctor/physician. SPECIFIC TREATMENT: (Follow all First Aid instructions in Section 4 of the Safety Data Sheet). Rinse skin with water/shower. Wash contaminated clothing before reuse.

### Section 5: Fire Fighting Measures

**Suitable Extinguishing Media:**

Use suitable extinguishing material for surrounding fire.

**Protection of Firefighters:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

	Products of Combustion
Sulfur Dioxide	Not Available

### Section 6: Accidental Release Measures

**Personal Precautions:**

Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.

**Environmental Precautions:**

Keep away from drains, surface and ground water. Avoid heat, flames, sparks and other sources of ignition.

**Methods for Containment and Cleanup:**

Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. If necessary, cover drains. Absorb large spills, dispose in appropriate containers.

## Section 7: Handling and Storage

### Handling:

See precautions in Section 2. Only trained personnel should handle this product. Always use approved personal protective equipment.

### Storage:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep separated from incompatible substances.

	Incompatibilities	Conditions to avoid
Sulfur Dioxide	Not Available	Not Available

## Section 8: Exposure Controls/Personal Protection

Exposure Guidelines	Threshold Limit Value -TLV (ppm)
Sulfur Dioxide	5

### Engineering Controls

No specific controls are needed.

### Eye Protection

Wear splash resistant safety goggles.

### Skin Protection

Wear chemical protective clothing, including gloves.

### Respiratory Protection

Use self-contained breathing apparatus.

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

	Physical State / Physical Form	Appearance / Color	Odor	Flash Point	Flammability	Partition Coefficient
Sulfur Dioxide	Gas	Colorless	Not Available	Nonflammable	False	0

	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits	Boiling Point	Freezing Point	Vapor Pressure
Sulfur Dioxide	Not Available	Not Available	Not Available	14 °F	-98.9 °F	49.841

	Vapor Density	Specific Gravity	Water Solubility	pH	Evaporation Rate	Viscosity
Sulfur Dioxide	2.26	1.434	10 %	0	Not Available	Gas: 0.0124 mPa.s at 18 °C

	Molecular Weight	Molecular Formula	Density	Volatility	Solvent Solubility
Sulfur Dioxide	64.058	SO2	1.377734	Not Available	Not available

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
Sulfur Dioxide	Stable at normal conditions	Not Available	Not Available

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
Sulfur Dioxide	Not Available	Not Available

## Section 11: Toxicology Information

The toxicology information is calculated for the mixture.

### Acute Toxicity Estimates (ATE) of the mixture.

Oral ATE (mg/kg)	Not Available
Inhalation ATE (ppm)	699.9999
Dermal ATE (mg/kg)	Not Available

### Additional health hazards:

Skin Corrosion/Irritation	H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
Eye Damage/Irritation	H318 CAUSES SERIOUS EYE DAMAGE.
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not Available
Carcinogenicity	Not Available
Reproductive Toxicity	Not Available
STOT – single exposure	Not Available
STOT – repeated exposure	Not Available
Aspiration Hazard	Not Available

## Section 12: Ecological Information

### Fate and Transport

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
<b>Sulfur Dioxide</b>	Fish toxicity: 0 Invertebrate toxicity: Algal toxicity: Phyto toxicity: Other toxicity:	Not available	Not available	Not available

## Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations. Do not dispose in sewers or waterways. Recycle if possible to do so. Return to manufacturer for disposal if needed.

## Section 14: Transportation Information

### U.S. DOT 49 CFR 172.101

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
<b>Sulfur Dioxide</b>	Sulfur Dioxide	UN1079	Not available	Not available	Forbidden	Forbidden	3, B14, T50, TP19

### Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk Group
<b>Sulfur Dioxide</b>	Sulfur Dioxide	UN1079	Not Available	Not Available

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
Sulfur Dioxide	Not Regulated.	500	500

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Sulfur Dioxide	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

### SARA 372.65

Sulfur Dioxide	Not Regulated.
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### OSHA Process Safety

Sulfur Dioxide	Not regulated
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### State Regulations

	CA Proposition 65
Sulfur Dioxide	

### Canadian Regulations

	WHMIS Classification
Sulfur Dioxide	Not regulated

### National Inventory Status

	US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Sulfur Dioxide	Sulfur dioxide	Not listed.	Listed on DSL.

## Section 16: Other Information

	NFPA Rating
Sulfur Dioxide	Health = 3, Flammability = 0, Instability = 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard