




Safety Data Sheet

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1、Product and company information

Item Title : SF6 (Sulfur hexafluoride)
Other names: Sulfur fluoride (SF6), (OC-6-11)-; Sulfur fluoride (SF6); Sulfur hexafluoride; Sulfur fluoride
Recommended uses and restrictions on the use: Synthetic/Analytical chemistry.
Manufacturer or vendor name, address and telephone : Jing He Science co., LTD 21F., No.1080, Zhongzheng Rd., Taoyuan City 330, Taiwan (R.O.C.) (886)-3-357-6633
Emergency contact telephone/fax: (886)-3-357-6633 / (886)-3-357-6616

2、Hazards Identification

Hazard Category : Pressurized gas
Mark Content : gas cylinders 
Warnings : Warning
Hazard Warning Information : Contains gas under pressure; may explode if heated. May cause frostbite. May displace oxygen and cause rapid suffocation.
Precautionary Statements : Use and store only outdoors or in a well-ventilated place. Protect from sunlight when ambient temperature exceeds 52°C (125°F).
Other hazards : -

3、Component identification information

Pure substance:

English and Chinese names: Sulfur hexafluoride
Synonyms: Sulfur fluoride
Chemical Abstracts Service Registry Number (CAS No.) : 2551-62-4
Hazardous substances Ingredient (percentage):-



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4、First aid measures

Different exposure pathways, first-aid methods:

Eye contact :

1. Immediately flush eyes thoroughly with water for at least 15 minutes.
2. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly.
3. Contact an ophthalmologist immediately.

Inhalation :

1. Remove victim to uncontaminated area wearing self contained breathing apparatus.
2. Keep victim warm and rested. Call a doctor.
3. Apply artificial respiration if breathing stopped.

Skin :

1. Flush contaminated skin with plenty of water.
2. Remove contaminated clothing and shoes.
3. Get medical attention if symptoms occur.
4. Wash clothing before reuse.
5. Clean shoes thoroughly before reuse

Ingestion :

1. Ingestion is not considered a potential route of exposure.

The most important symptoms and hazardous effects:

Effect of hypoxia

Protection of first-aiders:

Level C protective equipment should be worn in the security zone first aid

Physician: -

5、Fire Fighting Measures

Extinguishing Media:

Use an extinguishing agent suitable for the surrounding fire.

Special hazards that may be encountered when extinguishing a fire:

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

Special fire fighting procedures:

1. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.



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2. No action shall be taken involving any personal risk or without suitable training.
3. Contact supplier immediately for specialist advice.
4. Move containers from fire area if this can be done without risk.
5. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters and precautions:

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

6、Accidental Release Measures

Personal precautions:

1. No action shall be taken involving any personal risk or without suitable training.
2. Evacuate surrounding areas.
3. Avoid breathing gas.
4. Provide adequate ventilation.
5. Wear appropriate respirator when ventilation is inadequate.
6. Put on appropriate personal protective equipment.

Environmental precautions :

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment.

Clean-up method:

1. If the security tried to block.
2. In a well ventilated place, so that all the gas vent light.

7、Safe disposal and storage methods

Disposal:

1. Put on appropriate personal protective equipment.
2. Contains gas under pressure.
3. Avoid contact with eyes, skin and clothing.
4. Avoid breathing gas. Empty containers retain product residue and can be hazardous.
5. Do not puncture or incinerate container.



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6. Use equipment rated for cylinder pressure.
7. Close valve after each use and when empty.
8. Protect cylinders from physical damage; do not drag, roll, slide, or drop.
9. Use a suitable hand truck for cylinder movement.

Storage:

1. Store in a segregated and approved area.
2. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials.
3. Keep container tightly closed and sealed until ready for use.
4. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over.
5. Cylinder temperatures should not exceed 52 °C (125 °F).

8、Exposure prevention measures

Engineering controls:

1. Local exhaust.
2. The overall ventilation devices.
3. Provide sufficient fresh air to replenish the exhausted air.

Control parameters

Eight hours day time-weighted average permissible concentration (TWA)	Short period of time when the average allowable concentration (STEL)	Maximum allowable concentration (CEILING)	Biological indicators (BEIs)
1000ppm	1000ppm	—	—

Personal protective equipment:

Respiratory Protection:

Hypoxia wearing oxygen respirator or self-contained breathing apparatus.

Hand Protection: Wear working gloves

Eye protection: Wear safety glasses

Skin and body protection: —

Health measures:

1. After work Remove contaminated clothing, wash before reuse or discard.
2. No smoking or eating in the workplace.
3. Handling this substance , shall wash their hands thoroughly.



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4. Keep the work area clean.

9、Physical and chemical properties

Appearance: Colorless, odorless gas	Odor: Odorless
Odor threshold: Tasteless	Melting point:-50.8℃
PH:-	Boiling point / boiling range:-63.9℃
Flammability (solid, gas):-	Flash Point: -
Decomposition temperature: -	Test methods:-
Ignition temperature: -	Explosion limits: -
Vapor Pressure:320(psig)	Vapor Density:5.11 (air=1)
Density: -	Solubility: -
Octanol / water partition coefficient (log Kow):-	Evaporation rate:-

10、Stability and reactivity

Stability: Stable under normal conditions
Special Conditions of Hazardous Reaction: 1. Silane compounds: violent reaction and explosion. 2. Hydrogen: 400 °C when the reaction. 3. Sodium: reactions. 4. Sulfur: 400 °C when the reaction.
Conditions to avoid: Hot
Substances to be avoided: Silane compounds, hydrogen, sodium, sulfur
Hazardous decomposition products: Sulfur oxides

11、Toxicity data

Routes of exposure: Inhalation.
Symptoms: -
Acute toxicity:- Skin:- Inhalation:- Eyes: - LD50 (test animal, absorption route): - LC50 (test animal, absorption route): -
Chronic or long-term toxicity: -

12、Ecological data

Biological toxicity: -



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LC50 (fish): - EC50 (aquatic invertebrates): - Bioconcentration factor (BCF): -
Persistence and degradability: Not applicable for inorganic gases. Half-life (air): - Half-life (water surface): - Half-life (groundwater): - Half-life (soil): -
Bioaccumulation: -
Mobility in the soil: -
Other adverse effects: -

13、Waste Disposal Method

Waste Disposal Method: 1. This material and its container must be disposed of in a safe way. 2. Empty containers or liners may retain some product residues. 3. Do not puncture or incinerate container.

14、Transport information

UN Number: 1080
UN shipping name: Sulfur hexafluoride
Transport Hazard Classification:2.2
Packaging category: -
Marine pollutants (Yes / No): NO
Special delivery methods and precautions: -

15、Regulatory Information

Applicable laws and regulations: 1. Labor Safety and Health regulations. 2. Dangerous and Harmful Material of general rules. 3. Workers operating environment allowable concentration of harmful substances in the air standards. 4. Road traffic safety rules. 5. Industrial Waste Storage and Disposal Standards.
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6. High-pressure gas labor safety rules.

16、Other information

References	1. CHEMINFO database, CCINFO CD, 2005-3. 2. RTECS database, TOMES PLUS CD, Vol. 65, 2005. 3. HSDB database, TOMES PLUS CD, Vol. 65, 2005. 4. Chem Watch Database, 2005-1. 5. Council of Labor Affairs GHS website.	
Watchmaker units	Name: Jing He Science co., LTD	
	Address/Tel: No. 21, Dougong 8th Rd., Douliu City, Yunlin County 640, Taiwan (R. O. C.) (886)-5-551-3818 / (886)-5-551-4736	
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Tabulation Date	June 17 , 2020	
Remark	The above information symbol "-" means there is no current information, and the symbol "/" indicates that this field is not applicable to this substance. Biological indicators annotation "Ns" on behalf of non-specific indicators, symbol "Sc" represents a sense of need to pay attention to vulnerable groups, symbol "B" stands Please note that the background value, the symbol "Nq" Representative to determine the recommended values, symbols "Sq" represents the semi-quantitative recommended value.	