

EC-Safety Data Sheet
Sulphur hexafluoride, liquefied

Date:

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1 Substance/Preparations- and Firm name

Product name	Sulphur hexafluoride
Chemical notation	SF ₆
Manufacturer	
Telephone	

2 Product name

Substance	Sulphur hexafluoride, liquefied
Composition / Constituents	Sulphur hexafluoride is poisonless, not combustible and chemically sluggish in reaction
CAS-No.	2551-62-4
EG-No./EINECS-No.	219-854-2

3 Possible dangers

Danger notice	In closed rooms the gas displaces the air - DANGER OF SUFFOCATION! Sulphur hexafluoride is heavier as air, density ratio 5,04:1.
Warning notice	High concentrations cause suffocation. Symptoms can be loss of motivity and of consciousness. The affected doesn't realize the suffocation.

4 First-aid

Breathing	Use breathing apparatus and bring the persons to the fresh air. Hold them warm and calm. Call a doctor. At disorders of breathing use oxygen apparatus.
Swallowing	Swallowing is not considered as possible way of exposition

5 Fire fighting

Special risks	Gas bottle is under pressure. Fire can cause burst/explosion of the gas bottle
Dangerous products of combustion	No
Appropriate medium for fire fighting	All known mediums for fire fighting may be used
Special methods	If possible, stop gas leakage. Move away the bottles or cool bottles with water from safe position.
Special protection for fire brigade	In closed rooms use breathing apparatus

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6 Unintentional release

Personal protective proceeding	Entering the area use breathing apparatus. Evacuate the area. Look for adequate aeration.
Environment protective proceeding	Try to stop gas leakage. Prevent infiltration of the fluid into sewerage system, cellar, assembly pits or other places, on which accumulation can be dangerous.
Cleaning method	Aeration of the room

7 Handling and storing

Handling and storing	<p>Before passing of the gas sweep gas-technical equipment.</p> <p>Prevent infiltration of water into the gas bottle. Prevent backflow to the gas bottle. Use equipment only, which is appropriated for this product and the provided pressure and temperature. In case of doubt contact the vendor of the gas.</p> <p>Attend to tightness of the equipment. Store and manipulate gas only with protecting cap or fix-cap.</p> <p>Pay attention to the instructions of the vendor of the gas!</p> <p>Protect gas bottle from unacceptable heating > 65 °C, mechanical damage and turn over.</p> <p>Storing in adequate aerated location and separated from combustibile substances</p>
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8 Limit of exposition and personal protection

Personal protection proceeding	<p>Look for adequate aeration. Don't smoke in cause of handling with the product.</p> <p>MAK value:8-h average value:1.000 ppm (ml/m³) =6.000 mg/m³ momentary value:2.000 ppm (ml/m³) =12.000 mg/m³</p>
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9 Physical and chemical characteristics

Molar mass	146,05 g/mol
Melting point	-51 °C
Sublimation point	-64 °C
Critical temperature	46 °C
Density (15 °C, 1 bar)	6,10 kg/m ³
Relative density, gaseous (air = 1)	5,04
Steam pressure at 20 °C	not applicable
Solubility in water (25 °C, 1 bar)	0,005 l/kg
Appearance	colorless gas
Smell	without smell
Inflammation point	not applicable
Explosibility limit (in air)	under: not applicableupper: not applicable
Other data	Gas and steam are heavier as air. They can assemble in closed rooms, specially on the floor or in lower areas.

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10 Stability and reactivity

Stability and reactivity	Stable in standard conditions
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11 Toxicologic informations

General	Toxic effects of the product are not known
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12 Ecologic informations

General	There are not known harmful effects of the product to the environment
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13 Disposal

General	Prevent infiltration into sewerage system, cellar, assembly pits or similar places, on which accumulation of the gas could be dangerous. On adequate aerated safety place evaporation into the atmosphere
Disposal	Special waste number: 59802 (ÖNORM S 2100:1993) Return to vendor.

14 Transport

Land-carriage	UN-number ADR/GGVSR/RID/GGVE Designation:	1080 Class: 2 Fig. and Group: 2A Danger ticket: No. 2
Inland navigation transport	UN-number ADNR/GGVBinsch	1080 Class: 1d Fig.: 10
Sea transport	UN-number IMDG/GGVSee	1080 Class: 2 Page: 2114
Air transport	UN-number ICATO/IATA-DGR Passenger plane: Cargo plane:	1080 Class: 2 200 kg 200 kg
Other transports	If the cargo space is not separated from the driver's cab, don't transport in closed vehicles. The driver must know the possible dangers of the load and he must know, what to do in case of accidents or in emergency situations (Attend - code of practice at accidents. Lock gas bottles before transport. The valve of the bottles must be closed and tight. The hexagon cap nut of the valve or the vent plug (if available) must be mounted correct. The protective gear of the valve (protecting cap or fix-cap) must be mounted correct. Look for adequate aeration.	

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15 Directions

Designation (ChemG):

- Symbol	No
R-principles	No
S-principles	No

Designation of gas bottles:

- Symbol	Danger ticket No. 2
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Notices for special risks

No

Other directions

Kesselgesetz-BGBl Nr. 211/1992
Versandbehälter-VO BGBl Nr. 368/1996 i.g.F.
ADR-Übereinkommen BGBl Nr. 522/1976 i.g.F.
Chemikaliengesetz 1996 (ChemG 1996) BGBl Nr. I 53/1997 und zugehörige
Verordnungen
ArbeitnehmerInnenschutzgesetz (ASchG) BGBl Nr. 450/1994 i.g.F. und
zugehörige Verordnungen

16 Other data

At usage of this gas must be secured, that all coworkers are familiar in handling of this gas, the gas bottle and with the technical gas equipment.

On the risk of suffocation because of inappropriate use will be indicated explicitly

All data are no contract assurances of product characteristics.
They are according to todays state of knowledge.