

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name	Tetrachlorosilane
Product Code	S15300
CAS Number	10026-04-7
Other Names	Silicon Tetrachloride
IUPAC	
MFCD Number	MFCD00011229
EC/EINECS	233-054-0
REACH Number	01-2119489367-22-xxxx
	Index-No 014-002-00-4

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

Research and Development

3. Details of the supplier of the safety data sheet

Fluorochem Ltd
Unit 14, Graphite Way
Hadfield
Derbyshire
SK13 1QH
UK

Telephone: +44(0)1457 860111
Fax: +44(0)1457 892799
Email: sds@fluorochem.co.uk



4. Emergency telephone number

+44(0)7855 268577 -

2. Hazards Identification

1. Classification of the substance or mixture

EUH014		
H315	Skin Irrit. 2	
H319	Eye Irrit. 2	
H335	STOT SE 3	

2. Label elements

Signal Word **Warning**



Hazard Statements

EUH014	Reacts violently with water.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Phrases

P233	Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
Tetrachlorosilane		

CAS Number: 10026-04-7
EC/EINECS: 233-054-0
: 01-2119489367-22-xxxx

EUH014, H315, H319, H335 Eye Irrit. 2, Skin Irrit. 2,
STOT SE 3

<=100%

4. First Aid Measures

1. Description of first aid measures

- Skin Contact* P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P332 + P313: If skin irritation occurs: Get medical advice/attention.
Wash immediately with plenty of soap and water.
- Eye Contact* P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/attention.
Rinse opened eye for several minutes under running water.
- Ingestion* Wash out mouth with water.
- Inhalation* P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Remove casualty from exposure ensuring one's own safety whilst doing so.

2. Most important symptoms and effects

There may be pain and redness.
Severe burns may occur.

3. Indication of any immediate medical attention

Obtain medical attention in the event of any acute or delayed symptoms

5. Firefighting measures

1. Extinguishing Media

- Suitable* Carbon dioxide.
Alcohol resistant foam.
Dry chemical powder.
- Unsuitable* no data

2. Special Hazards arising from the substance or mixture

Corrosive.
In combustion toxic fumes may form.

3. Advice for Fire Fighters

Wear self-contained breathing apparatus.
Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

1. Personal Precautions

Evacuate the area immediately.
Do not attempt to take action without suitable protective clothing – see section 8 of SDS.

2. Environmental Precautions

Do not discharge into drains or rivers.
Contain the spillage using bunding.

3. Methods & Materials

Mix with sand or vermiculite.
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

- Safe Handling* Ensure there is sufficient ventilation of the area.
P264: Wash hands thoroughly after handling.
- Protection against explosions and fires* P362: Take off contaminated clothing and wash before reuse.

2. Conditions for safe storage, including any incompatibilities

- Managing Storage Risks* Store in cool, well ventilated area.
Keep container tightly closed.
Keep away from direct sunlight.
- Storage Controls* No special requirements
- Maintaining Integrity* P233: Keep container tightly closed.
Store away from oxidising agents
Keep in tightly closed container in cool area away from direct sunlight or heat sources.
- Other advice* P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
no further information available

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

- General protective and hygiene measures* P280: Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands during breaks and at the end of handling the material
Immediately remove any contaminated clothing
- Engineering measures* Ensure there is sufficient ventilation of the area.
- Eye / Face Protection* Safety Glasses with side-shields.
- Hand protection* Protective gloves.
- Respiratory protection* P260: Do not breathe dust/fume/gas/mist/vapours/spray.
Use breathing protection with high concentrations
- Skin protection* Handle with gloves.
Use proper glove removal technique to avoid skin contact with this product.
Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice.
Wash and dry hands.
Protective clothing.
- Other personal protection advice* no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	liquid
Odour	stench
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	-68.9°C

Initial boiling point and boiling range	57°C
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	259mb 20°C
Vapour density	No Data Available
Relative density	1.48
Solubility(ies):	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

Reacts violently with water.

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

Reacts violently with water.

4. Conditions to Avoid

Moisture

5. Incompatible Materials

Strong oxidizing agents.
Water

6. Hazardous Decomposition Products

In combustion emits toxic fumes.

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	Oral LD50 (Rat) 238mg/kg Dermal LD50 (Rabbit) >10000mg/kg
<i>Skin corrosion/irritation</i>	strong corrosive effect on skin and mucous membranes
<i>Serious eye Damage/irritation</i>	strong corrosive effect.
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	not known
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	not known
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known

Aspiration hazard not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. Ecological Information

1. Toxicity

not known

2. Persistence and degradability

not known

3. Bio-Accumulative Potential

not known

4. Mobility and Soil

not known

5. Results of PBT & vPvB assessment

not known

6. Other adverse effects

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

1. **UN Number:** 1818
2. **Shipping Name:** Silicon tetrachloride
3. **Transport hazard class(es):** : 8 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

1. **UN Number:** 1818
2. **Shipping Name:** SILICON TETRACHLORIDE
3. **Transport hazard class(es):** : 8 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**

6. Special Precautions for user:

7. Transport in bulk:

Sea (IMDG)

1. UN Number: 1818

2. Shipping Name: Silicon tetrachloride

3. Transport hazard class(es): : 8 Sub Class :



4. Packing group: II

5. Environmental hazards:

6. Special Precautions for user:

7. Transport in bulk:

TANKPROV: TP2, TP7, TP13

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)

RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO:International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS:Chemical Abstracts Service

2. Associated risk phrases according to European directive 67/548/EEC

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.