

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **4-(Chloromethyl)phenyltrimethoxysilane**
 Product Code S04350
 CAS Number 24413-04-5
 Other Names
 IUPAC
 MFCD Number MFCD00045269
 EC/EINECS
 REACH Number

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
 United Kingdom

Telephone: +44(0)1457 892111
 Fax number: +44(0)1457 892799
 Email: MSDS@fluorochem.co.uk



4. Emergency telephone number

07855 268577

2. Hazards Identification

1. Classification of the substance or mixture

H314	Skin Corr. 1B	R34
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* The risk codes have been generated using Annex VII of directive 67/548/EEC. Risk code combinations are not included.

2. Label elements

SignalWord **Danger**

Hazard Statements

H314	Causes severe skin burns and eye damage.
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Precautionary Phrases

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container to local regulations

3. Other Hazards

Additional Precautionary Phrases are located throughout the SDS.

3. Composition / Information on Ingredients

1. Substances

4-(Chloromethyl)phenyltrimethoxysilane

Assay:100% CAS Number :24413-04-5

2. Mixtures

Not Relevant

4. First Aid Measures**1. Description of first aid measures**

<i>Skin Contact</i>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
<i>Eye Contact</i>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<i>Ingestion</i>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
<i>Inhalation</i>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

2. Most important symptoms and effects

Severe burns may occur.

3. Indication of any immediate medical attention

No additional measures required

5. Firefighting measures**1. Extinguishing Media**

<i>Suitable</i>	Carbon dioxide. Dry chemical powder. sand
<i>Unsuitable</i>	Do not use water.

2. Special Hazards arising from the substance or mixture

Corrosive.

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**

Refer to section 8 of SDS for personal protection details.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

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

7. Handling and Storage

1. Personal Precautions

Safe Handling Ensure there is sufficient ventilation of the area.
Wash hands immediately after contamination.

Protection against explosions and fires Wash contaminated clothing before reuse.
Wash hands thoroughly after handling.

2. Conditions for safe storage, including any incompatibilities

Managing Storage Risks Store in cool, well ventilated area.
Keep container tightly closed.
Avoid contact with water or humidity.

Storage Controls No special requirements

Maintaining Integrity Store away from oxidising agents
Keep in tightly closed container in cool area away from direct sunlight or heat sources.

Other advice 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 Wear protective gloves/protective clothing/eye protection/face protection. .

Engineering measures Ensure there is sufficient ventilation of the area.

Eye / Face Protection Safety Glasses with side-shields.

Hand protection Appropriate impermeable gloves.

Respiratory protection Do not breathe dust/fume/gas/mist/vapours/spray. .
Use breathing protection with high concentrations

Skin protection Handle with appropriate gloves.
Gloves must be inspected prior to use.
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

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Modified: 11/05/2011

Odour	N/A
Odour threshold	N/A
PH	N/A
Melting point / Freezing point	N/A
Initial boiling point and boiling range	134-143°/10mm
Flash point	81°
Evaporation rate	N/A
Flammability(solid,gas)	N/A
Upper/lower flammability or explosive limits	N/A
Vapour pressure	N/A
Vapour density	N/A
Relative density	1.120
Solubility(ies):	N/A
Partition coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
Viscosity	N/A
Explosive properties	N/A
Oxidising properties	N/A

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

no unusual reactivity

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

no hazardous reactions known

4. Conditions to Avoid

Moist Air.

5. Incompatible Materials

Oxidising agents.
Water.
Bases.

6. Hazardous Decomposition Products

In combustion emits toxic fumes.

11. Toxicology information

1. Information

Acute Toxicity no data

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<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
<i>Aspiration hazard</i>	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

not known

13.Exposure Controls/Personal Protection

No Resource File

Disposal Operations

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

14. Transport Information

Air (ICAO)

1. UN Number: 3265

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2. **UN proper shipping name:** Corrosive liquid, acidic, organic, n.o.s. «
3. **Transport hazard class(es):** Class: 8 Sub Class :



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

Road (ADR)

1. **UN Number:** 3265
2. **UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
3. **Transport hazard class(es):** Class: 8 Sub Class :



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

Sea (IMDG)

1. **UN Number:** 3265
2. **UN proper shipping name:** Corrosive liquid, acidic, organic, n.o.s. «
3. **Transport hazard class(es):** Class: 8 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:** IBCINS: IBC03

UNTANKINS: T7
TANKPROV: TP1 TP28

15. Safety, health and environmental regulations

1. Safety, health and environmental regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

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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

R34	Causes burns
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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.