

OTTO CHEMIE PVT LTD

An ISO 9001 : 2015 & GMP Certified Company
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841
Email : info@ottokemi.com Web : www.ottokemi.com

Revision Date: 18-09-2026

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: 1H,1H,2H,2H-Perfluorodecyltriethoxysilane, 97%
Product Code: P 5705
CAS No: 101947-16-4

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification

OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,
Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008)

Acute toxicity, Category 4

Serious eye damage, Category 1

Carcinogenicity, Category 2

Reproductive toxicity, Category 1B

Effects on or via lactation

Specific target organ toxicity –
repeated exposure, Category 1,
Liver

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word

Hazard statements

H302 + H332

H318

H351

H360D

H362

H372

Precautionary statements

P263

P280

P301 + P312

P304 + P340 + P312

P305 + P351 + P338

P308 + P313

Reduced Labelling (<= 125 ml)

Hazard pictograms

Signal word

Hazard Statements

H351

H302: Harmful if swallowed.

H318: Causes serious eye damage.

H351: Suspected of causing cancer.

H360D: May damage the unborn child.

H362: May cause harm to breast-fed children.

H372: Causes damage to organs through
prolonged or repeated exposure.

Danger

Harmful if swallowed or if inhaled.

Causes serious eye damage.

Suspected of causing cancer.

May damage the unborn child.

May cause harm to breast-fed children.

Causes damage to organs (Liver) through prolonged or repeated exposure.

Avoid contact during pregnancy and while nursing.

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

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/ doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.

Danger

Suspected of causing cancer.

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H362
H372
H318
H360D
Precautionary Statements
P280
P305 + P351 + P338

P308 + P313
Supplemental Hazard
Statements
2.3 Other hazards
This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).
Ecological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Synonyms : Triethoxy-1H,1H,2H,2H-perfluorodecylsilane
Molecular Formula : C₁₆H₁₉F₁₇O₃Si
Molecular Weight : 610.38 g/mol
CAS No : 101947-16-4
Components

Chemical name	CAS-No.	Concentration (% w/w)	M-Factor, SCL, ATE
Triethoxy-1H,1H,2H,2H-perfluorodecylsilane	101947-16-4	101947-16-4	Acute toxicity estimate Acute oral toxicity: 500,1 mg/kg Acute inhalation toxicity (vapour): 11,1 mg/l

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician.

If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water

Foam

Carbon

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dioxide (CO₂)

Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting.

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Hazardous combustion products

Carbon oxides

Hydrogen fluoride

silicon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Advice for non-emergency personnel: Do not breathe vapours, aerosols.

Avoid substance contact. Ensure adequate ventilation.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).

Take up carefully with liquid-absorbent material (e.g. Chemizorb®).

Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Avoid generation of vapours/aerosols.

Hygiene measures

Immediately change contaminated clothing.

Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions

Tightly closed. Keep in a well-ventilated place.

Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class (TRGS 510)

6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

Recommended storage temperature

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

8.2 Exposure control

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Hand protection

Material: Nitrile rubber

Break through time: 60 min

Glove thickness: 0,11 mm

Protective index: Splash contact

Manufacturer: Dermatrill®

Material: Nitrile rubber

Break through time: 480 min

Glove thickness: 0,4 mm

Protective index: Full contact

Manufacturer: Camatrill®

Remarks

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D36124 Eichenzell, Internet: www.kcl.de).

Skin and body protection: protective clothing

Respiratory protection : required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards:

DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Environmental exposure controls

Advice: Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state	liquid
b) Color	colourless
c) Odor	No data available
d) Melting point/freezing point	No data available
e) Initial boiling point and boiling range	209 - 230 °C
f) Flammability (solid,gas)	No data available
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	> 110 °C Method: closed cup
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	No data available
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available

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p) Density	1,389 g/cm ³ (25 °C)
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available
9.2 Other safety information	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Materials to avoid: Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Triethoxy-1H,1H,2H,2H-perfluorodecylsilane

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

(Chronic toxicity)

12.2 Persistence and degradability

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Stability in soil : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment

This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very

bioaccumulative (vPvB).

Assessment : PBT substance

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12.6 Other adverse effects

Product:

Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

SECTION 14: Transport information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID : Not dangerous goods

IMDG : Not dangerous goods

IATA : Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: -

IMDG Marine pollutant:-

IATA: -

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered:

Number on list 3

REACH - Candidate List of Substances of Very

High Concern for Authorisation (Article 59).

Not applicable

Regulation (EU) No 2024/590 on substances that deplete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

Triethoxy-1H,1H,2H,2H-perfluorodecylsilane

REACH - List of substances subject to authorisation (Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the

European Parliament and of the

Council on the control of major-accident

hazards involving dangerous substances.

Not applicable

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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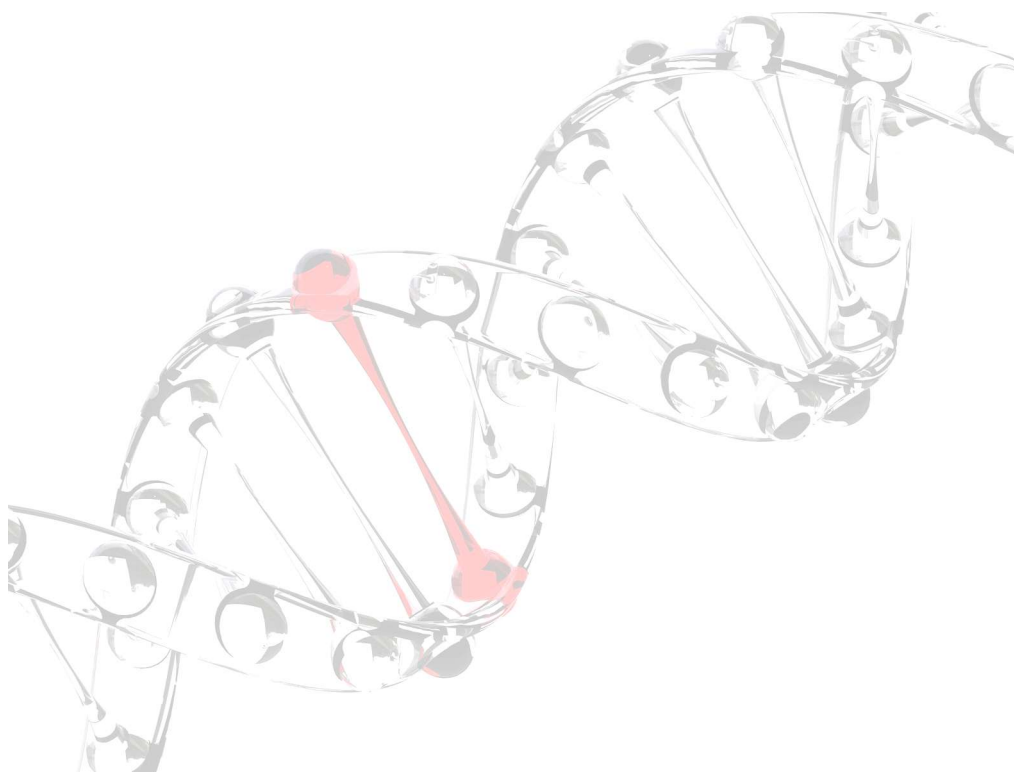
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SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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