

MATERIAL SAFETY DATA SHEET

TITANIUM TRICHLORIDE SOLUTION 15% (For Synthesis) (Titanium Chloride Solution) MSDS CAS : 7705-07-9

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name : Titanium Trichloride Solution 15%

CAS#: 7705-07-9

C.I. No.: Not available.

Synonym : Not available.

Chemical Name: Not available.

Chemical Formula: TiCl_3

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet:

Company identification: **OXFORD LAB FINE CHEM LLP**
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
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Tel: 91-250-2390989
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Titanium Trichloride Solution 15%	7705-07-9	100%

Section 3: Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1999/45

Classification : R14
C; R34

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Section 4: First Aid Measures

Description of first aid measures

Inhalation

Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact

Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Ingestion :

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Section 5: Fire and Explosion Data

Extinguishing media

Extinguishing media

Suitable extinguishing media

: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

: Do not use a heavy water stream.
Do not use extinguishing media containing water.

Surrounding fires

: Do not use extinguishing media containing water.

Special hazards arising from the substance or mixture

Hazardous combustion products

: Under fire conditions, hazardous fumes will be present.
Thermal decomposition generates : Corrosive vapours.

Advice for fire-fighters

Protection against fire

: Do not enter fire area without proper protective equipment,
Including respiratory protection.

Special procedures

: Exercise caution when fighting any chemical fire. Avoid (reject)
Fire-fighting water to enter environment.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For emergency responders

: Equip cleanup crew with proper protection.
Ventilate area.

Special precautions

: Do not allow water (or moist air) contact with this material.

For non-emergency personnel

: Evacuate unnecessary personnel.

Environmental precautions

Environmental precautions

: Prevent entry to sewers and public waters. Notify authorities if
product enters sewers or public waters.

Methods and materials for containment and cleaning up

Clean up methods

: Soak up spills with inert solids, such as clay or diatomaceous
earth as soon as possible. Collect spillage. Store away from other
materials.

Section 7: Handling and Storage

Precautions for safe handling

Handling	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.
Technical protective measures	: Provide good ventilation in process area to prevent formation of Vapor.

Conditions for safe storage, including any incompatibilities

Storage	: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
Storage regulation	: Comply with applicable regulations.
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.

Specific end uses

Specific end use(s)	: None.
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Section 8: Exposure Controls/Personal Protection

Personal protection	: Avoid all unnecessary exposure.
• Respiratory protection	: Wear approved mask.
• Hand protection	: Wear protective gloves.
• Skin protection	: Wear suitable protective clothing.
• Eye protection	: Chemical goggles or safety glasses.
• Others	: When using, do not eat, drink or smoke.

Control parameters

Occupational Exposure Limits	: No data available.
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Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid
Color	: Colorless
Odor	: Characteristic.
Odor threshold	: No data available.

Section 9: Physical and Chemical Properties (Continued)

pH value	: No data available.
Melting point [°C]	: No data available.
Decomposition point [°C]	: N/A
Critical temperature [°C]	: No data available.
Auto-ignition temperature [°C]	: No data available.
Flammability (solid, gas)	: N/A
Flash point [°C]	: No data available.
Boiling point [°C]	: 100°C
Initial boiling point [°C]	: No data available.
Final boiling point [°C]	: No data available.
Evaporation rate	: N/A
Vapour pressure [20°C]	: No data available.
Vapour pressure mm/Hg	: 17.535 mm of Hg (@ 2
Vapour density	: 0,62
Density [g/cm ³]	: 1,22
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Partially soluble in
Solubility in water	: No data available.
Log Pow octanol / water at 20°C	: No data available.
Solubility	: Acidic
Viscosity at 40°C [mm ² /s]	: No data available.
Molecular Weight	: 354.17

Other information

Explosive properties	: N/A
Explosion limits - upper [%]	: No data available.
Explosion limits - lower [%]	: No data available.
Oxidising properties	: No data available.

Section 10: Stability and Reactivity Data

Reactivity

Reactivity : Highly reactive material.

Section 10: Stability and Reactivity Data (Continued)

Chemical stability

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions : Reacts violently with water.

Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures, Moisture

Incompatible materials

Materials to avoid : Strong acids. Strong bases.

Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.
Thermal decomposition generates: Corrosive vapours.

Section 11: Toxicological Information

Information on toxicological effects

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Acute toxicity

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : Based on available data, the classification criteria are not met.

Corrosion

: Causes severe skin burns and eye damage.

Irritation

: Based on available data, the classification criteria are not met.

Sensitization

: Based on available data, the classification criteria are not met.

Mutagenicity

: Based on available data, the classification criteria are not met.

Carcinogenicity

: Based on available data, the classification criteria are not met.

Toxic for reproduction

: Based on available data, the classification criteria are not met.

STOT-single exposure

: Based on available data, the classification criteria are not met.

STOT-repeated exposure

: Based on available data, the classification criteria are not met.

Aspiration hazard

: Based on available data, the classification criteria are not met.

Section 12: Ecological Information

Toxicity

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Persistence – degradability

Persistence - degradability : Biodegradable.

Bio accumulative potential

Bio accumulative potential : Not established.

Mobility in soil

Mobility in soil : Not established.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Other adverse effects

Environmental precautions: Avoid release to the environment.

Section 13: Disposal Considerations

Waste treatment methods

General: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions: Do not allow water (or moist air) contact with this material.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N°	: 3264
H.I. nr	: 80
ADR - Class	: 8

Section 14: Transport Information

Labelling - Transport : 8: Corrosive substance.
ADR - Group : II

Sea transport (IMDG) [English only]

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N° : 3264
IMO-IMDG - Class or division : 8: Corrosive substance.
IMO-IMDG - Packing group : II

Air transport (ICAO-IATA) [English only]

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N° : 3264
IATA - Class or division : 8: Corrosive substance.
IATA - Packing group : II

Section 15: Other Regulatory Information

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

Safety, health and environmental: Ensure all national/local regulations are observed.

**Regulations/legislation specific for
The substance or mixture**

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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