

MSDS for Titanium (IV) Chloride, 99.9%

****MATERIAL SAFETY DATA SHEET****

MSDS for Titanium (IV) Chloride, 99.9%

Section 1- Chemical product and Company Identification.

MSDS Name	Titanium (IV) Chloride 99.9%
Catalog Number	19723-00000, 197230050, 19723-1000
Synonyms	Titanium Tetrachloride

Company identification (Europe)

Acros Organics BVBA Janssen Pharmaceuticalan3a
2440 Geel, Belgium Acros Organics

Company identification (USA)

One Reagent Lane Fairlawn, NJ 07410

For information in the US, call	800-ACROS-01
For information in the Europe, call	+32 14 57 52 11
Emergency Number Europe	+32 14 57 5299
Emergency Number US	201-796-7100
For CHEMTREC assistance call	800-424-9300
For International CHEMTREC assistance call	703-527-3887

Section 2-Composition, Information on ingredients

CAS#	Chemical name	%	EINECS	Haz	Symbols	Risk Phrases
7550-45-0	Titanium (IV) Chloride	99.9%	231-441-9			

Hazard Symbols: C
Risk Phrases: 14 34

Section 3- hazards Identification

EMERGENCY OVER VIEW

Reacts violently with water, causes burn. Moisture sensitive

POTENTIAL HEALTH EFFECTS

Eye: causes eye burns, causes redness and pain.

Headquarter: 106 The Crescent, Henleaze, Bristol, BS9 4RT
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Skin: causes skin burns, causes redness and pain.

Ingestion: causes gastrointestinal tract burns. May cause digestive tract irritation with abdominal pain, nausea and diarrhea

Effect may be delayed. May cause irritation of respiratory tract with burning pains in nose and throat, coughing, wheezing, shortness of breath, inhalation and pulmonary edema. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

Chronic Not available

Section 4- First aid Measures

Eyes: Immediately flash eyes with plenty of water for at least 150 minutes while removing contaminated clothing and shoes.

Ingestion: DO NOT induce vomiting, if conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid. Remove from exposure and move to fresh air immediately. If not breathing, give artificial aspiration. If breathing is difficult, give oxygen.

Notes to Physician

Section 5 – Fire Fighting Measures

General Information As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NOISH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing media Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

Section 6- Accidental release Measure

General Information Use proper personal protective equipment as indicated in Section 8.

Spills/ Leaks Absorb spill with inert material (e.g. vermiculite sand or earth), then place in suitable container. Do not expose spill to water.

Section 7- Handling and storage

Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on handling clothes use only in chemical fume hood. Keep from contact with moist air and steam.

Storage: Store in cool, dry place. Store in a tightly closed container. Corrosives area. Store under nitrogen.

Section 8- Exposure control, personal protection

ENGINEERING CONTROLS:

Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate ventilation to keep airborne concentration low.

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EXPOSURE LIMITS

CAS# 7550-45-0:
Russia: 1 mg/m³ TWA

PERSONAL PROTECTION EQUIPMENT

Eyes: Wear chemical goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or respirator European Standard EN 149.
Always use a NIOSH or European Standards EN 149 approved respirator when necessary.

Section 9- Physical and chemical properties

Physical state:	Clear liquid
Color:	Light yellow
Odor:	Penetrating odor
PH:	Not available
Vapor pressure:	12 hpa @ 20 deg C°
Viscosity:	0.08mPas 20 deg C°
Boiling Point:	136.5 deg C° @760.00 m Hg
Freezing/Melting Point:	24 deg C°
Auto ignition Temperature:	Not available
Flash Point:	Not available
Explosion Limits, lower:	Not available
Explosion Limits, upper:	Not available

Decomposition temperature**Solubility in water****Reacts****Specific gravity/Density****1.7260/cm³****Molecular Formula****TiCl₄****Molecular Weight****189.71****Section 10- stability and reactivity****Chemical Stability****Stable under normal temperature and pressure.****Conditions to avoid****Incompatible materials, contact with water, moist and air.****Incompatibilities with other materials****Water, strong oxidizing agents, alcohols.****Hazardous Decomposition Products****Hydrogen Chloride, titanium/ titanium oxides****Hazardous Polymerization****Will not occur.****RTECS#****CAS# 7550-45-0: XR1925000, CAS# 7550-450-0: Inhalation,
mouse: LC50=100 mg/m³/2H; Inhalation, LD50/LC5
rat: LC50= 400mg/ m³. Skin, rabbit: LD50=3610 mg/kg****SKIN, RABBIT: LD0= 1000 MH\G/KG ORAL, rat: LD100= 464
mg/kg INHALATION, RAT: LD50=0.46 MG/L/4H****Carcinogenicity Titanium (IV) chloride: Not listed by ACGIH, IARC, or NPT.****Other:****See actual entry in RTECS for complete information.****Section 12 Ecological information****Ecotoxicity Algae: EC50: 8.5 mg/l; 72 h;****Section 1- Disposal Considerations
regulations.****Dispose in a manner consistent with federal state and local****Section 12- Transport information****IATA****IMO****RID/ADR**

TITANIUM TETRACHLORIDE**Shipping** (Forbidden to ship via passenger or cargo air)**Name** TITANIUM TETRACHLORIDE**Class** 8**UN Number** 1838**Packing Group** II

USA RQ; CAS# 7550-45-0: 1000lb final RQ; 454 kg final RQ

Section 15- Regulatory Information**European/International Regulations****European Labeling in According with EC directives****Hazard Symbols:** C**Risk Phrases:** R 14 Reacts violently with water. R34 causes burns.**Safety Phrases:****S 7/8:** keep container tightly closed and dry.**S 26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.**S36/37/39:** Wear suitable protective clothing, and eye/face protection.**S 15** In case of accident or if feel unwell, seek medical advice immediately (show the label where possible).**WCK(water Danger/Protection)****CAS# 7550-45-0: 1****Canada:**

CAS 7550-45-0 is listed on Canada's DSL list.

CAS 7550-45-0 is listed on Canada's Ingredients Disclosure list.

US FEDERAL TSCA CAS 7550-45-0 is listed on the TSCA inventory.**Section 1- Additional Information**



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MSDS Creation Date 7/16/1996

Revision on #3 date 4/08/2003

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