

Revision Date 23-Mar-2012

Revision Number 2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Titanium(III) chloride tetrahydrofuran complex
Cat No. 375160000; 375160010; 375160100
Synonyms None Known.

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion/irritation	Category 1 B
Flammable solids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s)

F - Highly flammable
 C - Corrosive

R-phrases(s)

R11 - Highly flammable
 R14 - Reacts violently with water
 R19 - May form explosive peroxides
 R29 - Contact with water liberates toxic gas
 R34 - Causes burns

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SECTION 2. HAZARDS IDENTIFICATION
Label Elements

Signal Word
Danger
Hazard Statements

H228 - Flammable solid
H318 - Causes serious eye damage
EUH014 - Reacts violently with water
EUH019 - May form explosive peroxides
EUH029 - Contact with water liberates toxic gas

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P280 - Wear eye protection/ face protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/ physician

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Titanium(III) chloride tetrahydrofuran complex 18039-90-2		100	18039-90-2	F; R11 R14 R19 R29 C; R34	Skin Corr. 1B (H314) Flam. Sol. 2 (H228) (EUH014) (EUH019) (EUH029)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

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SECTION 4. FIRST AID MEASURES**Description of first aid measures****Eye Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Ingestion

Do not induce vomiting. Call a physician immediately.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

Water.

Special hazards arising from the substance or mixture

Contact with water liberates toxic gas. Water reactive. Combustible material. Produce flammable gases on contact with water.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not expose spill to water.

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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation. Use explosion-proof equipment. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container tightly closed. Refrigerator/flammables.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Use explosion-proof electrical/ventilating/lighting/equipment Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Powder, Solid

Appearance

Blue

pH

No information available.

Boiling Point/Range

No information available.

Melting Point/Range

>250°C / 482°F

Flash Point

No information available.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Autoignition Temperature	No information available.
Water Solubility	reacts violently
Molecular Formula	C ₁₂ H ₂₄ Cl ₃ O ₃ Ti
Molecular Weight	370.56

SECTION 10. STABILITY AND REACTIVITYReactivityChemical Stability

Moisture sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization	No information available
Hazardous Reactions .	No information available.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition ProductsHydrogen chloride gas. Carbon monoxide (CO). Carbon dioxide (CO₂).**SECTION 11. TOXICOLOGICAL INFORMATION**Information on Toxicological EffectsAcute Toxicity

Product Information	No acute toxicity information is available for this product
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Component InformationChronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
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Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.

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SECTION 11. TOXICOLOGICAL INFORMATION

Developmental Effects	No information available.
Target Organs	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated.
Endocrine Disruptor Information	None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants
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Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	2925
Hazard Class	4.1
Subsidiary Hazard Class	8
Packing Group	II

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SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

ADR

UN-No 2925
Hazard Class 4.1
Subsidiary Hazard Class 8
Packing Group II
Proper Shipping Name FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

IATA

UN-No 2925
Hazard Class 4.1
Subsidiary Hazard Class 8
Packing Group II
Proper Shipping Name FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.*

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
AICS - Inventory of Chemical Substances
KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

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SECTION 16. OTHER INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable

R14 - Reacts violently with water

R19 - May form explosive peroxides

R29 - Contact with water liberates toxic gas

R34 - Causes burns

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Revision Summary

Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet