

# **SAFETY DATA SHEET**

Revision Date 14-Feb-2020 Revision Number 2

1. Identification

Product Name Trimethoxy(pentamethylcyclopentadienyl)titanium(IV)

Cat No.: H27885

**CAS-No** 123927-75-3

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

**Emergency Telephone Number** 

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 3

Label Elements

Signal Word

Warning

**Hazard Statements** 

Flammable liquid and vapor



### **Precautionary Statements**

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

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

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Trimethoxy(pentamethylcyclopentadienyl)	123927-75-3	97
titanium(IV)		

### 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

nausea and vomiting

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

Suitable Extinguishing Media Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used

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to cool closed containers.

**Unsuitable Extinguishing Media** No information available

60 °C / 140 °F **Flash Point** 

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available Lower No data available

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Combustible material. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2).

### **Protective Equipment and Precautions for Firefighters**

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

NFPA

Health Physical hazards **Flammability** Instability 0 2 0 N/A

### Accidental release measures

Ensure adequate ventilation. Use personal protective equipment as required. Remove all **Personal Precautions** 

sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Up

Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

# 7. Handling and storage

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not Handling

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open

flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take

precautionary measures against static discharges.

Storage Keep away from heat, sparks and flame. Store contents under argon. Keep containers

tightly closed in a dry, cool and well-ventilated place.

### 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

None under normal use conditions. Ensure adequate ventilation, especially in confined **Engineering Measures** 

areas. Use explosion-proof electrical/ventilating/lighting/equipment.

**Personal Protective Equipment** 

**Eye/face Protection**Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Liquid Appearance Yellow

Odor No information available
Odor Threshold No information available
pH No information available

Melting Point/Range No data available

Boiling Point/Range 285 °C / 545 °F @ 760 mmHg

Flash Point 60 °C / 140 °F Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 1.081

Solubility No information available

Partition coefficient; n-octanol/water

No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular Formula C13 H24 O3 Ti

Molecular Weight 276.21

### 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable. Moisture sensitive.

Conditions to Avoid Incompatible products. Exposure to moist air or water. Keep away from open flames, hot

surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

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

Toxicologically Synergistic No information available

Products

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available Irritation

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Trimethoxy(pentameth ylcyclopentadienyl)	123927-75-3	Not listed				
titanium(IV)						

**Mutagenic Effects** No information available

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

### 12. Ecological information

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability No information available

**Bioaccumulation/ Accumulation** No information available.

No information available. **Mobility** 

# 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

DOT Not regulated Not regulated **TDG** 

IATA

UN1993 **UN-No Hazard Class** 3 Ш **Packing Group** 

IMDG/IMO

UN1993 **UN-No Hazard Class** 3 Ш **Packing Group** 

# 15. Regulatory information

### **United States of America Inventory**

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Trimethoxy(pentamethylcyclopent adienyl) titanium(IV)	123927-75-3	-	-	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Trimethoxy(pentamethylcyclopent	123927-75-3	-	-	-	-	-	-	-	2015-3-6512
adienvl) titanium(IV)									

#### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information	

Prepared By Health, Safety and Environmental Department

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www.alfa.com

**Revision Date** 14-Feb-2020 **Print Date** 14-Feb-2020

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 123927-75-3.

#### **Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**