Material Safety Data Sheet

Version 4.9 Revision Date 02/01/2013 Print Date 10/28/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Trimethyl(methylcyclopentadienyl)platinum(IV)

Product Number 697540 Brand Aldrich

Supplier Sigma-Aldrich

> 3050 Spruce Street SAINT LOUIS MO 63103

USA

+1 800-325-5832 Telephone Fax +1 800-325-5052 Emergency Phone # (For (314) 776-6555

both supplier and

manufacturer)

Preparation Information Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Highly toxic by ingestion, Skin sensitiser

GHS Classification

Acute toxicity, Oral (Category 1) Acute toxicity, Dermal (Category 2) Skin sensitisation (Category 1) Acute aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H300 + H310 Fatal if swallowed or in contact with skin H317 May cause an allergic skin reaction. Very toxic to aquatic life.

H400

Precautionary statement(s)

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water. P310 Immediately call a POISON CENTER or doctor/ physician.

HMIS Classification

3 Health hazard: Flammability: 2 Physical hazards: 0

NFPA Rating

Health hazard: 4

Aldrich - 697540 Page 1 of 7 Fire: 2
Reactivity Hazard: 0

Potential Health Effects

InhalationMay be harmful if inhaled. May cause respiratory tract irritation.SkinMay be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation. **Ingestion** May be fatal if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : MeCpPtMe3

Formula : C₉H₁₆Pt Molecular Weight : 319.30 g/mol

Component		Concentration
Trimethyl(methylcyclopentadienyl)platinum(IV)		
CAS-No.	94442-22-5	-

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Aldrich - 697540 Page 2 of 7

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Air sensitive. Handle and store under inert gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

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

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid
Colour off-white

Safety data

pH no data available

Melting point/range: 30 - 31 °C (86 - 88 °F) - lit.

point/freezing point

Boiling point 23 °C (73 °F) at 0.071 hPa (0.053 mmHg)

Flash point 55 °C (131 °F) - closed cup

Ignition temperature no data available
Auto-ignition no data available
temperature

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density no data available

Water solubility insoluble

Partition coefficient: no data available

Aldrich - 697540 Page 3 of 7

n-octanol/water

Relative vapour

density

no data available

Odour no data available
Odour Threshold no data available
Evapouration rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

Air

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral - rat - 5 - 25 mg/kg

Inhalation LC50

no data available

Dermal LD50

LD50 Dermal - rabbit -

Remarks: Very toxic in contact with skin.

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Genotoxicity in vitro - This material has shown a positive Ames test, an in vitro test that indicates a possible potential to produce a carcinogenic effect.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be fatal if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

no data available

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.031 mg/l - 48 h

and other aquatic Method: OECD Test Guideline 202

invertebrates

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 3467 Class: 6.1 Packing group: I

Proper shipping name: Organometallic compound, toxic, solid, n.o.s. (Trimethyl(methylcyclopentadienyl)platinum(IV))

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 3467 Class: 6.1 Packing group: I EMS-No: F-A, S-A

Proper shipping name: ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S.

(Trimethyl(methylcyclopentadienyl)platinum(IV))

Marine pollutant: No

IATA

UN number: 3467 Class: 6.1 Packing group: I

Proper shipping name: Organometallic compound, solid, toxic, n.o.s. (Trimethyl(methylcyclopentadienyl)platinum(IV))

15. REGULATORY INFORMATION

OSHA Hazards

Highly toxic by ingestion, Skin sensitiser

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No.

Revision Date

Trimethyl(methylcyclopentadienyl)platinum(IV)

94442-22-5

New Jersey Right To Know Components

CAS-No.

Revision Date

Trimethyl(methylcyclopentadienyl)platinum(IV)

94442-22-5

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

Copyright 2013 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Aldrich - 697540 Page 6 of 7

Aldrich - 697540 Page 7 of 7