

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-16

Print Date: 2024-01-23

SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

 $\mbox{Product name} \qquad : \mbox{Chloro}[(1,2,3,4,5,6-\eta)-2,2'',4,4'',6,6''-\mbox{hexamethyl}[1,1':3',1''-\mbox{terphenyl}]-2'-\mbox{Product name}$

thiolato-kS][triisopropylphosphine-kP]ruthenium(II)

Product Number : C405510

Brand : aladdin

CAS-No. : 1621182-04-4

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

CFR 1910.1200:Not classifiable

2.2 GHS Label elements, including precautionary statements

Pictogram no data available Signal word no data available

Hazard statement(s)
Precautionary statement(s)

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients



14078 Meridian Parkway, Riverside, CA. 92518

3.1 Substances

Synonyms : no data available Formula : C33H46ClPRuS

Molecular weight : 642.28

CAS No. : 1621182-04-4 EC-NO. : no data available

Component Classification Concentration

Chloro[(1,2,3,4,5,6-η)-

2,2",4,4",6,6"-

hexamethyl[1,1':3',1"terphenyl]-2'-thiolato-κS] [triisopropylphosphine-

κP]ruthenium(II)

no data available no data available

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

no data available

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

In case of skin contact

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

If swallowed

Get medical advice/attention if you feel unwell. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media



14078 Meridian Parkway, Riverside, CA. 92518

Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

These products include: Carbon oxides Sulfur oxides Halogenated compounds Phosphates Metallic oxides. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. WARNING: Highly toxic HCl gas is produced during combustion.

5.3 Advice for firefighters

Wear self-contained breathing apparatus if possible.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up

Clean up the dust and collect it in a closed container, taking care not to disperse it. Adhered or aggregated materials shall be disposed of in a timely manner in accordance with local laws and regulations.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Conditions for safe storage, including any incompatibilities

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s)

no data available



14078 Meridian Parkway, Riverside, CA. 92518

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

Personal protective equipment

Eye/face protection

Safety glasses. A face-shield, if the situation requires.

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

Protective gloves. Protective clothing. Protective boots, if the situation requires.

Respiratory protection

Dust respirator. Follow local and national regulations.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance form: Crystal - Powder Solid color: Yellow - Deep yellow red

b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing point no data available
f) Initial boiling point and boiling range no data available
g) Flash point no data available
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits

k) Vapour pressure

l) Vapour density

m) Relative density

n) Water solubility

n) Water solubility

no data available



14078 Meridian Parkway, Riverside, CA. 92518

p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties N no data available

t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Hydrogen chloride, Phosphorus oxide, Sulfur oxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

no data available

Carcinogenicity



14078 Meridian Parkway, Riverside, CA. 92518

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.Other considerations: Observe all federal, state and local regulations when disposing of the substance.



14078 Meridian Parkway, Riverside, CA. 92518

Contaminated packaging

Disposal of container: Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available available

Environmental Hazards: no data available

IMDG

UN number: no data available Packing group: no data available EMS-No: no data available

Proper shipping name: no data available

IATA

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data available

SECTION 15: Regulatory information

Toxic Substance Control Act

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list: (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec. (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet. US Federal Regulations

US Federal Regulations

SARA 313: Not Listed

SARA 302: Not Listed

State Regulations

Massachusetts Not Listed

New Jersey Not Listed

Pennsylvania Not Listed



14078 Meridian Parkway, Riverside, CA. 92518

Other Information

NFPA Rating: HMIS Classification: Health: 0 Health: 0 Flammability: 0 Flammability: 0 Instability: 0 Physical: 0

SECTION 16: Other information

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

 Creation Date
 13-Oct-2022

 Revision Date
 16-Jan-2024

 Print Date
 23-Jan-2024

Revision Summary SDS sections updated v1

Disclaimer

Copyright Aladdin Co. Ltd. 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. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.