

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-21  
Print Date: 2024-01-26

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

### 1.1 Product identifiers

Product name : Zirconocene chloride hydride  
Product Number : Z103200  
Brand : aladdin  
CAS-No. : 37342-97-5

### 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)

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H228

Flammable solid

H261

In contact with water releases flammable gas

Precautionary statement(s)

P210

Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.

P240

Ground/bond container and receiving equipment.

P241

Use explosion-proof [electrical/ventilating/lighting/.../] equipment.

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P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P231+P232	Handle under inert gas/... Protect from moisture.
P302	IF ON SKIN:
P361	Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P402+P404	Store in a dry place. Store in a closed container.
P501	Dispose of contents/container to an approved waste disposal plant.

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	: Di(cyclopentadienyl)zirconium(IV) chloride hydride;Bis(cyclopentadienyl)zirconium(IV) chloride hydride;Bis(cyclopentadienyl)zirconium Chloride Hydride;Schwartz' reagent
Formula	: C10H11ClZr
Molecular weight	: 257.87
CAS No.	: 37342-97-5
EC-NO.	: 253-479-5

Component	Classification	Concentration
Zirconocene chloride hydride	no data available	95%

## SECTION 4: First aid measures

### 4.1 Description of 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

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Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

#### 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

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Dry powder Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

no data available

#### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides, Hydrogen chloride gas, Zirconium

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate  
<br/>ventilation. Evacuate personnel to safe areas. Avoid breathing dust. <br/><br/>Aldrich - 223670 Page 3 of 7 <br/>

#### 6.2 Environmental precautions

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

#### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-  
<br/>brushing and place in container for disposal according to local regulations (see section 13). Do not flush with  
water. <br/>Keep in suitab

#### 6.4 Reference to other sections

no data available

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid formation of dust and aerosols.<br/>Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No <br/>smoking.<br/>

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.<br/>Never allow product to get in contact with water during storage.<br/>Air, light, and moisture sensitive.Handle and store under inert gas.<br/>

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice.Wash hands before breaks and at the end of <br/>workday.<br/>

Personal protective equipment

Eye/face protection

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

Skin protection

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

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Body Protection

Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment <br/>must be selected according to the concentration and amount of the dangerous substance at the specific workplace.<br/>

Respiratory protection

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

Control of environmental exposure

no data available

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	300°C
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	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
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

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Reacts violently with water.

### 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

acids, Bases, Acid chlorides, Oxidizing agents, Alcohols, Halogens

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## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- Carbon oxides, Hydrogen chloride gas, Zirconium oxides

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## 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

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.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

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

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## SECTION 12: Ecological information

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available <br/>

### 12.3 Bioaccumulative potential

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no data available <br/>

#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

no data available <br/><br/>

#### 12.6 Other adverse effects

no data available

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### SECTION 13:

#### 13.1 Disposal considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material <br/>is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed <br/>professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent <br/>and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

no data available

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### SECTION 14: Transport information

DOT (US)

UN number: 3131

Packing group: II

Class: 4.3(8)

Proper shipping name: WATER-REACTIVE SOLID, CORROSIVE, N.O.S. (Bis(3-cyclopentadienyl)chlorohydrozirconium)  
Reportable Quantity(RQ): no data available  
Poison Inhalation Hazard: No

Environmental Hazards: No

IMDG

UN number: 3131

Packing group: II

EMS-No: No

Proper shipping name: WATER-REACTIVE SOLID, CORROSIVE, N.O.S. (Bis(3-cyclopentadienyl)chlorohydrozirconium)

IATA

UN number: 3131

Packing group: II

Class: 4.3(8)

Proper shipping name: WATER-REACTIVE SOLID, CORROSIVE, N.O.S. (Bis(3-cyclopentadienyl)chlorohydrozirconium)

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### SECTION 15: Regulatory information

no data available

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### SECTION 16: Other information

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