

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-25

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

1.1 Product identifiers

Product name : Hexafluorozirconic acid solution
Product Number : H113658
Brand : aladdin
CAS-No. : 12021-95-3

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)

H314

Causes severe skin burns and eye damage

H318

Causes serious eye damage

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].

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P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P405

Store locked up.

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	: Dihydrogen hexafluorozirconate solution
Formula	: H ₂ ZrF ₆
Molecular weight	: 207.23
CAS No.	: 12021-95-3
EC-NO.	: no data available

Component	Classification	Concentration
Hexafluorozirconic acid solution	no data available	45 wt. % in H ₂ O

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

no data available

If inhaled

remove to fresh air.If not breathing give artificial respiration.If breathing is difficult, give oxygen.

In case of skin contact

flush with copious amounts of water for at least 15 minutes.Remove contaminated clothing and shoes.Call a physician.

In case of eye contact

flush with copious amounts of water for at least 15 minutes.Assure adequate flushing by separating the eyelids with fingers.Call a physician.

If swallowed

wash out mouth with water provided person is conscious.Call a physician.Do not induce vomiting.

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

Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.4 Further information

no data available

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

6.2 Environmental precautions

no data available

6.3 Methods and materials for containment and cleaning up

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

no data available

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

Wash contaminated clothing before reuse.Discard contaminated shoes.Wash thoroughly after handling.

Personal protective equipment

Eye/face protection

Chemical safety goggles.

Skin protection

Compatible chemical-resistant gloves.

Body Protection

no data available

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.If the respirator is the sole means of protection, use a full-face supplied air respirator.

Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: liquid color: light green
b) Odour	Tasteless
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	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	1.512
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

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- | | |
|---------------------------|-------------------|
| 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

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents, Acids.

10.6 Hazardous decomposition products

Hazardous Decomposition Products: Hydrogen fluoride, Zirconium oxides.

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

no data available

Reproductive toxicity

no data available

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Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled.

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

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. Observe all federal, state, and local environmental regulations.

Contaminated packaging

no data available

SECTION 14: Transport information

DOT (US)

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UN number: 3264	Packing group: 8	Class: II
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s.	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: no data available		
IMDG		
UN number: 3264	Packing group: 8	EMS-No: no data available
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s.		
IATA		
UN number: 3264	Packing group: 8	Class: II
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s.		

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

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