

[Ammonium Hexachloroiridate\(III\)  
Monohydrate](#)

[Pricing >](#)

<b>Linear Formula</b>	(NH <sub>4</sub> ) <sub>3</sub> IrCl <sub>6</sub> • H <sub>2</sub> O
<b>Pubchem CID</b>	18366487
<b>MDL Number</b>	MFCD00010881
<b>EC No.</b>	241-007-0
<b>IUPAC Name</b>	triazanium; hexachloroiridium(3-); hydrate
<b>SMILES</b>	[NH4+].[NH4+].[NH4+].O.Cl[Ir-3](Cl)(Cl)(Cl)(Cl)Cl
<b>Inchl Identifier</b>	InChI=1S/6ClH.Ir.3H3N.H2O/h6*1H;;3*1H3;1H2/q;;;;;+3;;;;/p-3
<b>Inchl Key</b>	LJHBEBFYNDGCZ-UHFFFAOYSA-K

<b>Signal Word</b>	Warning
<b>Hazard Statements</b>	H315-H319
<b>Hazard Codes</b>	Xi
<b>Precautionary Statements</b>	P305 + P351 + P338
<b>Flash Point</b>	Not applicable
<b>Risk Codes</b>	36/38
<b>Safety Statements</b>	26-36
<b>RTECS Number</b>	N/A
<b>Transport Information</b>	NONH
<b>WGK Germany</b>	3

**GHS Pictograms**

**[GHS07  
Exclamation  
Point](#)**



**[GHS05  
Corrosive](#)**



[Create Printable PDF](#)

# SAFETY DATA SHEET

Date Accessed: 04/19/2024

Date Revised: 01/15/2022

---

## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #29796-57-4

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

---

## SECTION 2. HAZARDS IDENTIFICATION

,Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)  
GHS05 Corrosion  
Met. Corr.1 H290 May be corrosive to metals.  
GHS07  
Acute Tox. 4 H302 Harmful if swallowed.  
Hazards not otherwise classified  
No data available  
GHS label elements  
GHS label elements, including precautionary statements  
Hazard pictograms,



,GHS05 GHS07  
Signal word  
Warning  
Hazard statements  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
Precautionary statements  
P234 Keep only in original container.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this

product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell.

P406 Store in corrosive resistant container with a resistant inner liner.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

Not controlled

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

2

0

1

Health (acute effects) = 2

Flammability = 0

Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A,

---

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

,Substances

CAS No. / Substance Name:

15752-05-3 Ammonium hexachloroiridate(III) ,

---

### SECTION 4. FIRST AID MEASURES

,Description of first aid measures

If inhaled:

Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.  
Information for doctor  
Most important symptoms and effects, both acute and delayed  
No data available  
Indication of any immediate medical attention and special treatment needed  
No data available,

---

## **SECTION 5. FIREFIGHTING MEASURES**

,Extinguishing media  
Suitable extinguishing agents  
Product is not flammable. Use fire-fighting measures that suit the surrounding fire.  
Special hazards arising from the substance or mixture  
If this product is involved in a fire, the following can be released:  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)  
Metal oxide fume  
Advice for firefighters  
Protective equipment:  
Wear self-contained respirator.  
Wear fully protective impervious suit.,

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

,Personal precautions, protective equipment and emergency procedures  
Use personal protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Environmental precautions:  
Do not allow material to be released to the environment without official permits.  
Methods and materials for containment and cleanup:  
Dispose of contaminated material as waste according to section 13.  
Prevention of secondary hazards:  
No special measures required.  
Reference to other sections  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.,

---

## **SECTION 7. HANDLING AND STORAGE**

,Handling

Precautions for safe handling

Handle under dry protective gas.

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

The product is not flammable

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from water/moisture.

Store away from oxidizing agents.

Store away from metals.

Further information about storage conditions:

Store under dry inert gas.

This product is hygroscopic.

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Protect from humidity and water.

Specific end use(s)

No data available,

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

,Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and

having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

None.

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Maintain an ergonomically appropriate working environment.  
Breathing equipment:  
Use suitable respirator when high concentrations are present.  
Protection of hands:  
Impervious gloves  
Inspect gloves prior to use.  
Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.  
Penetration time of glove material (in minutes)  
No data available  
Eye protection:  
Safety glasses  
Body protection:  
Protective work clothing.,

---

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

,Information on basic physical and chemical properties  
Appearance:  
Form: Crystalline  
Odor: Odorless  
Odor threshold: No data available.  
pH: N/A  
Melting point/Melting range: No data available  
Boiling point/Boiling range: No data available  
Sublimation temperature / start: No data available  
Flammability (solid, gas)  
No data available.  
Ignition temperature: No data available  
Decomposition temperature: No data available  
Autoignition: No data available.  
Danger of explosion: No data available.  
Explosion limits:  
Lower: No data available  
Upper: No data available  
Vapor pressure: N/A  
Density: No data available  
Relative density  
No data available.  
Vapor density  
N/A  
Evaporation rate  
N/A  
Solubility in Water (H<sub>2</sub>O): Soluble  
Partition coefficient (n-octanol/water): No data available.  
Viscosity:  
Dynamic: N/A

Kinematic: N/A  
Other information  
No data available,

---

## **SECTION 10. STABILITY AND REACTIVITY**

,Reactivity  
No data available  
Chemical stability  
Stable under recommended storage conditions.  
Thermal decomposition / conditions to be avoided:  
Decomposition will not occur if used and stored according to specifications.  
Possibility of hazardous reactions  
Reacts with strong oxidizing agents  
Conditions to avoid  
No data available  
Incompatible materials:  
Water/moisture  
Oxidizing agents  
Metals  
Hazardous decomposition products:  
Nitrogen oxides  
Hydrogen chloride (HCl)  
Metal oxide fume,

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

,Information on toxicological effects  
Acute toxicity:  
Harmful if swallowed.  
LD/LC50 values that are relevant for classification:  
No data  
Skin irritation or corrosion:  
May cause irritation  
Eye irritation or corrosion:  
May cause irritation  
Sensitization:  
No sensitizing effects known.  
Germ cell mutagenicity:  
No effects known.  
Carcinogenicity:  
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.  
Reproductive toxicity:  
No effects known.  
Specific target organ system toxicity - repeated exposure:  
No effects known.

Specific target organ system toxicity - single exposure:  
No effects known.  
Aspiration hazard:  
No effects known.  
Subacute to chronic toxicity: No effects known.  
Additional toxicological information:  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.,

---

## **SECTION 12. ECOLOGICAL INFORMATION**

,Toxicity  
Aquatic toxicity:  
No data available  
Persistence and degradability  
No data available  
Bioaccumulative potential  
No data available  
Mobility in soil  
No data available  
Additional ecological information:  
Do not allow material to be released to the environment without official permits.  
Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems.  
Avoid transfer into the environment.  
Results of PBT and vPvB assessment  
PBT:  
N/A  
vPvB:  
N/A  
Other adverse effects  
No data available,

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

,Waste treatment methods  
Recommendation  
Consult official regulations to ensure proper disposal.  
Uncleaned packagings:  
Recommendation:  
Disposal must be made according to official regulations.  
Recommended cleansing agent:  
Water, if necessary with cleansing agents.,

---



## SECTION 14. TRANSPORT INFORMATION

,UN-Number  
DOT, ADN, IMDG, IATA  
N/A  
UN proper shipping name  
DOT, ADN, IMDG, IATA  
N/A  
Transport hazard class(es)  
DOT, ADR, ADN, IMDG, IATA  
Class  
N/A  
Packing group  
DOT, IMDG, IATA  
N/A  
Environmental hazards:  
N/A  
Special precautions for user  
N/A  
Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code  
N/A  
Transport/Additional information:  
DOT  
Marine Pollutant (DOT):  
No,

---

## SECTION 15. REGULATORY INFORMATION

,Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
GHS GHS label elements, including precautionary  
statements  
Hazard pictograms  
GHS05  
GHS07  
Signal word  
Warning  
Hazard statements  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
Precautionary statements  
P234 Keep only in original container.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this  
product.  
P301+P312 IF SWALLOWED: Call a POISON  
CENTER/doctor/.../if you feel unwell.  
P406 Store in corrosive resistant container with a  
resistant inner liner.  
P501 Dispose of contents/container in accordance

with local/regional/  
national/international regulations.  
National regulations  
All components of this product are listed in the U.S.  
Environmental Protection Agency Toxic Substances  
Control Act Chemical substance Inventory.  
All components of this product are listed on the  
Canadian Domestic Substances List (DSL).  
SARA Section 313 (specific toxic chemical listings)  
Substance is not listed.  
California Proposition 65  
Prop 65 - Chemicals known to cause cancer  
Substance is not listed.  
Prop 65 - Developmental toxicity  
Substance is not listed.  
Prop 65 - Developmental toxicity, female  
Substance is not listed.  
Prop 65 - Developmental toxicity, male  
Substance is not listed.  
Information about limitation of use:  
For use only by technically qualified individuals.  
Other regulations, limitations and prohibitive  
regulations  
Substance of Very High Concern (SVHC) according to  
the REACH Regulations (EC) No. 1907/2006.  
Substance is not listed.  
The conditions of restrictions according to Article 67  
and Annex XVII of the Regulation (EC) No 1907/2006  
(REACH) for the manufacturing, placing on the market  
and use must be observed.  
Substance is not listed.  
Annex XIV of the REACH Regulations (requiring  
Authorisation for use)  
Substance is not listed.  
Chemical safety assessment:  
A Chemical Safety Assessment has not been carried  
out.

---

## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No.  
1907/2006 (REACH). 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. American Elements shall not be held  
liable for any damage resulting from handling or from  
contact with the above product. See reverse side of  
invoice or packing slip for additional terms and  
conditions of sale. COPYRIGHT 1997-2022

AMERICAN ELEMENTS. LICENSED GRANTED TO  
MAKE UNLIMITED PAPER COPIES FOR INTERNAL  
USE ONLY.

---