



Zinc Perchlorate Hexahydrate		Pricing >
Signal Word	Danger	
Hazard Statements	H272-H314	
Hazard Codes	O, C	
Precautionary Statements	P210 - P220 - P260 - P280 - P303 + P361 + P353 - P305 + P351 + P338	
Risk Codes	8-34	
Safety Statements	17-26-27-36/37/39-45	
RTECS Number	SD0525000	
Transport Information	UN 1481 5.1/PG II	
WGK Germany	3	
GHS Pictograms	GHS03 Oxidizer  GHS05 Corrosive 	

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SAFETY DATA SHEET

Date Accessed: 04/27/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #10025-64-6

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
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Oxidizing solids (Category 2), H272
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
For the full text of the H-Statements mentioned in this Section, see Section 16.
GHS Label elements, including precautionary statements
Pictogram



Signal word Danger
Hazard statement(s)
H272 May intensify fire; oxidizer.
H314 Causes severe skin burns and eye damage.
Precautionary statement(s)
P210 Keep away from heat.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dusts or mists.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310
IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.
Continue
rinsing. Immediately call a POISON CENTER/ doctor.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry
chemical or alcohol-resistant
foam to extinguish.
P405 Store locked up.
P501 Dispose of contents/ container to an approved
waste disposal
plant.
Hazards not otherwise classified (HNOC) or not
covered by GHS - none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Formula : $\text{Cl}_2\text{O}_8\text{Zn} \cdot 6\text{H}_2\text{O}$
Molecular weight : 372.38 g/mol
CAS-No. : 10025-64-6
EC-No. : 237-122-0

SECTION 4. FIRST AID MEASURES

Description of first-aid measures
General advice
First aiders need to protect themselves. Show this
material safety data sheet to the doctor
in attendance.
If inhaled
After inhalation: fresh air. Call in physician.
In case of skin contact
In case of skin contact: Take off immediately all
contaminated clothing. Rinse skin with
water/ shower. Call a physician immediately.
In case of eye contact
After eye contact: rinse out with plenty of water.
Immediately call in ophthalmologist.
Remove contact lenses.
If swallowed
After swallowing: make victim drink water (two
glasses at most), avoid vomiting (risk of
perforation). Call a physician immediately. Do not
attempt to neutralise.
Most important symptoms and effects, both acute and
delayed
The most important known symptoms and effects are
described in the labelling (see section
2) and/or in section 11
Indication of any immediate medical attention and

special treatment needed
No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Hydrogen chloride gas

Zinc/zinc oxides

Not combustible.

Has a fire-promoting effect due to release of oxygen.

Ambient fire may liberate hazardous vapours.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire

extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions

(see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Separately or together with other oxidising substances only and away from sources of ignition and heat. Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite combustible substances on contact with them.

Hygroscopic.

Storage class (TRGS 510): 5.1A: Strongly oxidizing hazardous materials

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

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

Body Protection

protective clothing

Respiratory protection
required when dusts are generated.
Our recommendations on filtering respiratory
protection are based on the following
standards: DIN EN 143, DIN 14387 and other
accompanying standards relating to
the used respiratory protection system.
Control of environmental exposure
Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- a) Appearance Form: Crystals with lumps
Color: white
 - b) Odor No data available
 - c) Odor 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 (°) Not applicable
 - h) Evaporation rate No data available
 - i) Flammability (solid, gas)
No data available
 - j) Upper/lower flammability or explosive limits
No data available
 - k) Vapor pressure No data available
 - l) Vapor density No data available
 - m) Density No data available
Relative density No data available
 - n) Water solubility No data available
 - o) Partition coefficient: n-octanol/water
No data available
 - p) Autoignition temperature
No data available
 - q) Decomposition temperature
No data available
 - r) Viscosity No data available
 - s) Explosive properties No data available
 - t) Oxidizing properties The substance or mixture is
classified as oxidizing with the
category 2.
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SECTION 10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions
No data available
Conditions to avoid
Avoid moisture.
no information available
Incompatible materials
Strong reducing agents, Organic materials, Powdered metals
Hazardous decomposition products
In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity
Oral: No data available
Inhalation: No data available
Dermal: No data available
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: No ingredient 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 ingredient 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 on OSHA's list of regulated carcinogens.
Reproductive toxicity
No data available
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
RTECS: SD0525000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

UN number: 1481 Class: 5.1 Packing group: II

Proper shipping name: Perchlorates, inorganic, n.o.s.

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 1481 Class: 5.1 Packing group: II EMS-

No: F-H, S-Q

Proper shipping name: PERCHLORATES,
INORGANIC, N.O.S.
IATA
UN number: 1481 Class: 5.1 Packing group: II
Proper shipping name: Perchlorates, inorganic, n.o.s.

SECTION 15. REGULATORY INFORMATION

SARA 302 Components

This material does not contain any components with a
section 302 EHS TPQ.

SARA 313 Components

The following components are subject to reporting
levels established by SARA Title III,
Section 313:

Zinc perchlorate hexahydrate

CAS-No.

10025-64-6

Revision Date

2015-07-08

SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard

Massachusetts Right To Know Components

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

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
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