SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.1 Creation Date: July 15, 2019 Revision Date: August 17, 2023

SEC	TION 1: Identification		
1.1	GHS Product identifier		
	Product name	7784-13-6 3CYT62D3GA Aluminum chloride Aluminum chloride [USP] Drysol Xerac AC Aluminum chloride, hexahydrate AI3-01918 Aluminum chloride hexahydrate Aluminum trichloride hexahydrate Aluminum(III) chloride, hexahydrate CCRIS 5552 UNII-3CYT62D3GA	
1.2	Other means of identification	n	
	Product number Other names	7784-13-6 Aluminum chloride crystal;ALUMINIUM CHLORIDE HYDRATE;Aluminum chloride cr	
1.3	Recommended use of the chemical and restrictions on use		
	Identified uses Uses advised against	For laboratory and Industrial use only. no data available	
1.4	Supplier's details		
	Company Address Telephone	Zhongshan Greenrock Technology Co., Ltd. Jinsan Avenue, Sanjiao Town, Zhongshan City, Guangdong Province, China +86-2087066781	
1.5	1.5 Emergency phone number		
	Emergency phone number Service hours	+86-2087066781 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).	
SEC	TION 2: Hazard identificat	ion	
2.1	Classification of the substance or mixture		

Skin corrosion, Sub-category 1B

2.2 GHS label elements, including precautionary statements

Pictogram(s)

Signal word	Danger	
Hazard statement(s)	H314 Causes severe skin burns and eye damage	
Precautionary statement(s)		
Prevention	P260 Do not breathe dust/fume/gas/mist/vapours/spray.	
	P264 Wash thoroughly after handling.	
	P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/	
Response	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
	P363 Wash contaminated clothing before reuse.	
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P316 Get emergency medical help immediately.	
	P321 Specific treatment (see on this label).	
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Storage	P405 Store locked up.	
Disposal	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposa	

2.3 Other hazards which do not result in classification

no data available

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
7784-13-6 3CYT62D3GA Aluminum chloride Aluminum chloride [USP] Drysol Xerac AC Aluminum chloride, hexahydrate AI3-01918 Aluminum chloride hexahydrate Aluminum trichloride hexahydrate Aluminum(III) chloride, hexahydrate CCRIS 5552 UNII- 3CYT62D3GA	Aluminium chloride	7784- 13-6	616- 520-1	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2 Most important symptoms/effects, acute and delayed

no data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

- 5.2 Specific hazards arising from the chemical
 - no data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Solid. Fine powder, homogeneous by all appearances.
Colour	Slightly yellowish.
Odour	no data available
Melting point/freezing point	190 °C. Atm. press.:2 500 hPa.
Boiling point or initial boiling point and	181.2 °C. Atm. press.:1 013 hPa. Remarks:Sublimation temperature.
boiling range	
Flammability	no data available
Lower and upper explosion	no data available
limit/flammability limit	
Flash point	no data available
Auto-ignition temperature	Remarks:No self-heating detected.
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	In water: 477 g/L (20 °C)
Partition coefficient n-octanol/water	no data available
Vapour pressure	0 hPa. Temperature:20 °C.;0.001 hPa. Temperature:30 °C.;0.004 hPa. Temperature:50 °C.
Density and/or relative density	2.44 g/cm ³ . Temperature:25 °C.
Relative vapour density	no data available
Particle characteristics	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

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10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

Acute toxicity

- Oral: LD50 rat (male) 3 450 mg/kg bw. .
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

Toxicity 12.1

- Toxicity to fish: LC50 Pimephales promelas 1.16 mg/L 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 Daphnia magna 27.3 mg/L 48 h. Remarks:AlCl3. Toxicity to algae: NOEC Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) ->= 0.044 mg/L - 72 h.
- Toxicity to microorganisms: EC10 activated sludge, domestic -> 1 000 mg/L 180 min. Remarks: Respiration rate.

Persistence and degradability 12.2

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

Other adverse effects 12.5

no data available

SECTION 13: Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

14.1 UN Number

	ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)	
14.2	UN Proper Shipping Name			
	ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)	
14.3	Transport hazard class(es)			
	ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)	
14.4	Packing group, if applicable			
	ADR/RID: Not dangerous goods. (For reference only, please check.)	IMDG: Not dangerous goods. (For reference only, please check.)	IATA: Not dangerous goods. (For reference only, please check.)	
14.5	Environmental hazards			
	ADR/RID: No	IMDG: No	IATA: No	
14.6	Special precautions for user no data available			
14.7	Transport in bulk according to IMO instruments			

no data available

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question 15.1

Chemical name	Common names and synonyms	CAS number	EC number
Aluminium chloride	Aluminium chloride	7784-13-6	616-520-1
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
EC Inventory			Not Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Not Listed.

SECTION 16: Other information

Information on revision

Creation Date	July 15, 2019
Revision Date	August 17, 2023

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulation concerning the International Carriage of Dangerous Goods by Rail IMDG: International Maritime Dangerous Goods
- .
- IATA: International Air Transportation Association ٠
- ٠
- TWA: Time Weighted Average STEL: Short term exposure limit LC50: Lethal Concentration 50% ٠
- •
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50% •

References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- · IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
 Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
 ECHA European Chemicals Agency, website: https://echa.europa.eu/

Any questions regarding this SDS, Please send your inquiry to export@greenrockchem.com

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