

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Aluminum Chloride USP Hexahydrate Crystals
Commercial Name Aluminium trichloride hexahydrat
Product Use Inorganic Chemical
Restrictions On Use Not available
Product Code 30-1286
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Skin corrosion, Subcategory 1B H314 causes severe skin burns and eye damage serious eye damage
CFR 1910.1200 Category 1 H318 causes serious eye damage

Signal Word DANGER

Hazard Statement(s) Causes severe skin burns and eye damage. Corrosive to the respiratory track.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention Do not breathe dust or mist. Wear protective gloves/protective clothing/ eye protection/ face protection/hearing protection.

Response IF ON SKIN: take off immediately all contaminated clothing. Rinse skin with water. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call POISON CENTER/ doctor.

Storage Not available

Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Aluminum chloride hexahydrate
% By Weight 100
CAS# 7784-13-6
Molecular Weight 241.43 g/mole
Chemical Formula AlCl₃·6H₂O
Synonym(s) Not available.

Mixtures Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Aluminum chloride hexahydrate	7784-13-6	100	Not available.	ORAL (LD50):Acute: 3311mg/kg [Rat.].

Section 4: First-Aid Measures

Inhalation	If inhaled, remove to fresh air. If symptoms persist, call a physician.
Skin Contact	After contact with skin, wash immediately with plenty of water. Call a physician if irritation develops or persists.
Eye Contact	In the case of contact with the eyes, rinse immediately with plenty of water and seek medical advice. Protect unharmed eye.
Ingestion	When swallowed, allow water to be drunk. Call a physician immediately.
Symptoms/Effects	
Acute	Not available
Delayed	Not available.
Immediate Medical Attention	
Treat symptomatically.	

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media
Water spray Foam Carbon dioxide (CO₂) Dry powder

Unsuitable Extinguishing Media
high volume water jet

Products of Combustion
Some risk may be expected of corrosive and toxic decomposition products. The product itself does not burn.

Firefighters Special Equipment and Precautions
Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Provide adequate ventilation. Wear personal protective equipment. Unprotected persons must be kept away. Avoid dust formation. Environmental precautions: Do not flush into surface water or sanitary sewer system. Methods and materials for containment and cleaning up: Ventilate the area. Avoid dust formation. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

Section 7: Handling and Storage

Precautions for safe handling: Advice on safe handling: Perform filling operations only at stations with exhaust ventilation facilities. Do not breathe dust. Avoid contact with skin and eyes. Use product only in closed system. Advice on protection against fire and explosion: Normal measures for preventive fire protection. Hygiene measures: Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink. Avoid contact with skin and the eyes. Storage Conditions for safe storage, including any incompatibilities: Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Value: TWA : Time weighted average Control parameters: 2 mg/m ³ Basis: ELV (IE) TWA Value: DNEL/PNEC Control parameters: 1 mg/m ³ Exposure routes: Inhalation Remarks: anhydrous substance Value: DNEL/PNEC Control parameters: 2 mg/m ³ Exposure routes: Inhalation Remarks: anhydrous substance Value: DNEL/PNEC Control parameters: 0.3 mg/m ³ Exposure routes: Ingestion Remarks: anhydrous substance
Engineering Controls	Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Avoid breathing dust. Engineering measures : Use with local exhaust ventilation.
Personal Protection	Eye protection : Safety goggles Hand protection : Impervious gloves Gloves must be inspected prior to use. Replace when worn. Skin and body protection : Protective suit Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment. Hygiene measures : Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink. Avoid contact with the skin and the eyes.

Section 9: Physical and Chemical Properties

Appearance	Solid. Color: colourless		
Odor	odourless		
Odor Threshold	Not applicable		
Melting Point	Not available	pH	2.5 - 3.5 at , 20 °C
Freezing Point	Not applicable	Vapor Pressure	Not applicable.
Boiling Point/Range	Not available	Vapor Density	Not available.
Decomposition temperature	No decomposition if used as	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available	Evaporation Rate	Not applicable
Flash Point	Not applicable.	Autoignition temperature	not auto-flammable
Flammability	The product is not flammable	Flammability or Explosive Limits:	
		Lower	Not applicable
		Upper	Not applicable
Solubility(ies)	477 g/l water		
Other	Density : ca. 2.4 g/cm ³ at 20 °C Bulk density : ca. 700 kg/m ³		

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Stable under normal conditions.
Hazardous Polymerization	Hazardous polymerisation does not occur.
Conditions to Avoid	no data available
Incompatible Materials	Bases
Hazardous Decomposition Products	Hydrogen chloride gas

Section 11: Toxicological Information

RTECS	Not available.
Acute Toxicity	
LD50: 3,470 mg/kg Species: Rat, female Test substance: aluminium chloride, anhydrous LD50: 3,450 mg/kg Species: Rat, male Test substance: aluminium chloride, anhydrous	
Skin Corrosion/Irritation	Irritating to skin.
Serious Eye Damage/Irritation	Irritating to eyes.
Respiratory or Skin Sensitization	Not available
Germ Cell Mutagenicity	Not available
Carcinogenicity	Not available
Reproductive Toxicity	Not available
Routes of Entry	Eye. Skin.
Symptoms Related to Exposure	Not available

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Potential Health Effects

Not available.

Target Organ(s)

Not available

Section 12: Ecological Information**Ecotoxicity**

Toxicity to fish LC50: 36.6 mg/l Exposure time: 96 h Species: (Oncorhynchus mykiss (rainbow trout) static test LC50: 36.6 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Test substance: aluminium chloride, anhydrous flow-through test NOEC: 0.25 mg/l Exposure time: 42 d Species: Oncorhynchus mykiss (rainbow trout) Test substance: aluminium chloride, anhydrous toxicity in aquatic plants: No data available Toxicity to daphnia and other aquatic invertebrates static test EC50: 27.3 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Test substance: aluminium chloride, anhydrous Reproduction Test NOEC: 0.8 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test substance: aluminium chloride, anhydrous static test EC50: 7.4 mg/l Exposure time: 48 h Species: Ceriodaphnia (water flea) Test substance: aluminium chloride, anhydrous Toxicity to bacteria : LC50: > 1,000 mg/l Exposure time: 14 d Species: Eisenia sp. (annelids) NOEC: 100 mg/l Exposure time: 42 d Species: Eisenia sp. (annelids)

Persistence and Degradability

The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative Potential

Not available.

Mobility in Soil

Not available.

Other Adverse Effects

Do not flush into surface water or sanitary sewer system

Section 13: Disposal Considerations**Waste Disposal**

Product: Dispose according to legal requirements Packaging: Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Disposal of Container

Not available.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

DOT Not dangerous goods

Section 15: Regulatory Information**Regulations**

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards : Acute Health Hazard California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Other

WHMIS CLASS E: Corrosive solid. (Canada);DSCL (EEC) R36/38- Irritating to eyes and skin.;Gloves.;Synthetic apron.;Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.;Splash goggles.

Section 16: Other Information

Changes to MSDS from previous date are due to the following: Change from AlliedSignal logo to Honeywell logo