GHS Safety Data Sheet

SDS No.: ALH02XAEG

Date Issued: 2018/08/30

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: AlCl₃ Aluminum chloride, anhydrous

Product number:	Purity	Form	Size (mm) or Shape
ALH03XB	99.99%(4N)	solid	-
ALH04XB	99.999 % (5N)	solid	_

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd

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Section 2. Hazards identification

GHS Classification

Environmental Hazards	Physical Hazards
Hazardous to the aquatic environment, -acute toxicity : Category1 -chronic toxicity : Category1	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified
	Hazardous to the aquatic environment, -acute toxicity : Category1



Pictograms or symbols

Warning word: DANGER	
Hazard information	Description of precaution
Harmful if swallowed Causes severe skin burns and eye damage	Obtain special instructions. Read and understand all safety precautions before handling. Wear protective gloves/protective clothing/ eye protection/ respiratory protection / face protection during handling. Avoid breathing dust/fume/vapors. Do not eat, drink or smoke when using this product,
Causes serious eye damage Suspected of causing genetic defects	and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. Avoid release to the environment and collect spillage.
Suspected of damaging fertility or the unborn child	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
May cause damage to organs through prolonged or repeated exposure	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
(nervous system) Very toxic to aquatic life	lenses, if present and easy to do. Continue rinsing. IF ON SKIN; Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin
Very toxic to aquatic life with long lasting effects	irritation occurs, get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.
	Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information:

In case of fire, may liberate irritating or toxic gases/ fume.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Aluminum trichloride
Chemical formula:	AlCl ₃
Single Substance or Compound:	Single substance
Composition:	100%
CAS#:	7446-70-0
RTECS#:	BD0525000
TSCA inventory:	listed
EINECS:	2312081

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to
Skin contact:	rinse for at least 15 minutes and get medical attention. Promptly flush contaminated skin with soap or mild detergent and water.
	Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air.
	Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media:	Carbon dioxide, Dry chemical powder, dry sand.	
	DO NOT use a direct water stream.	
Fire fighting:	The product is not combustible.	
	Self-contained breathing apparatus and full protective clothing should be	
	used, if the material is involved in fire.	
Specific hazards arising from the chemical:		
	In case of fire, may liberate irritating or toxic gases/ fume.	

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dusts.	
Environmental hazard precautions:		
	Shut off leak if without risk.	
	Prevent flow out to river, etc. so as not to badly affect.	
Method for containment and cleaning up:		
	Avoid unnecessary contacts with spills.	
	Indoor leakage: Ventilate as much as possible until the cleaning is completed.	
	Outdoor leakage: Work from the windward and evacuate the leeward crowd.	
	Gather up, pack in closed DOT-approved waste container as much as possible.	
	Carefully collect remnant and move to a safe place.	

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling:	Deliquescent. Handle the material in a dry atmosphere.
	Use protective wears and local ventilation equipment, if inhalation or skin
	contact is foreseen.
	Avoid prolonged or repeated exposure.

Precautions to be taken in storage:

General precautions:	Store the material in a sealed container.
	Store in a cool, dry, well ventilated and dark place away from
	incompatible materials.

Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH (2013): No data available OSHA (2006) : No data available	
Facility measures:	Local ventilation of closed work room or total proper ventilation to prevent inhalation.	
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, face shields, protective gloves.	

Section 9. Physical and chemical properties

Color and Form:	White solid
Chemical formula:	AlCl ₃
Formula weight:	133.3
Melting point:	192 °C
Boiling point:	180 °C(sublimes)
Density:	2.43 g/cm^3
Water solubility	Soluble (May decompose on contact with water.)
Flammable:	Non-flammable substance
Oxidation:	None

Section 10. Stability and reactivity

Stability:	Stable in closed container at room temperature. Deliquescent.
Reactvity	Denquescent.
neactivity	
Condition to avoid:	Moisture, water.
Hazardous decomposition products.:	

Contact with water liberates hydrogen chloride.

Section 11. Toxicological information

Acute toxicity(Oral):	GHS : Category 4 ; Harmful if swallowed
	Oral rat $LD_{50} = 370 \text{ mg/kg}(ATSDR(2008))$ etc.
Acute toxicity(Dermal, inhalation):	GHS : No data available
Skin corrosive / irritation:	GHS : Category 1; Causes severe skin burns and eye damage
Serious eyes damage / eye irritation:	GHS : Category 1 ; Causes serious eye damage
Respiratory sensitization:	GHS : No data available
Skin sensitization:	GHS : No data available
Germ cell mutagenicity:	GHS: Category 2; Suspected of causing genetic defects
Carcinogenicity:	GHS : No data available
Reproductive toxicity:	GHS : Category 2 ; Suspected of damaging fertility or the unborn child
Specific target organ toxicity	
-single exposure	GHS : No data available

Specific target organ toxicity		
-repeated exposure:	GHS : Category 2; May cause damage to organs through	
	prolonged or repeated exposure (nervous system)	
Aspiration hazard:	GHS : No data available	
Section 19 Feelerical information		

Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment

-acute toxicity:	GHS: Category 1; Very toxic to aquatic life
	Fish(Salmo salar) $LC_{50}(96h) = 0.37 \text{ mg/L} (EHC194(1997))$
-chronic toxicity:	GHS: Category 1; Very toxic to aquatic life with long lasting effects
Hazardous the ozone layer:	GHS : No data available
	No Freon or Halon
Fish toxicity:	See above.
Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available

Section 13. Disposal considerations

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Disposal method:
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User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number:	1726
IATA shipping name:	ALUMINIUM CHLORIDE, ANHYDROUS
IATA classification:	Hazardous Class 8 (Corrosive substances)
IATA packing group:	П
HS code:	2827.32
Marine pollution:	None

Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.