

## Aluminum Chlorohydrate

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /  
March 26, 2012 / Rules and Regulation

Revision Date: 15-Dec-2021  
Supersedes: 01-Nov-2019

### 1 PRODUCT & COMPANY IDENTIFICATION

<b>Product Name:</b>	Aluminum Chlorohydrate	<b>Distributor:</b>	MakingCosmetics Inc.
<b>Synonyms:</b>	Aluminum hydroxy chloride, Dialuminium chloride pentahydroxide	<b>Address:</b>	10800 231 <sup>st</sup> Way NE Redmond, WA 98053 (USA)
<b>INCI Name:</b>	Aluminum Chlorohydrate	<b>Phone / Fax:</b>	425-292-9502 / 425-292-9601
<b>CAS Number:</b>	12042-91-0	<b>Web:</b>	<a href="http://www.makingcosmetics.com">www.makingcosmetics.com</a>
<b>Formula:</b>	No data available	<b>Emergency Telephone Number:</b>	1-800-424-9300 (Chemtrec)
<b>Product Form:</b>	Liquid		
<b>Product Use:</b>	Cosmetic use		

### 2 HAZARDS IDENTIFICATION

**GHS Classification:** Combustible dust  
**Signal Word:** **WARNING!**  
**GHS Hazard Pictograms:** None  
**GHS Hazard Statements:** May form combustible dust concentrations in air.  
**GHS Precautionary Statements:** P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233: Keep container tightly closed.  
P243: Take precautionary measures against static discharge.

**Potential Health Hazards:** Eyes: May cause eye irritation.  
Inhalation: May cause respiratory tract irritation.  
Skin: May cause skin irritation.  
Ingestion: May cause gastrointestinal irritation.

**NFPA Ratings (704):**

Health	N/A	N/A
Flammability	N/A	N/A
Reactivity	N/A	N/A
Specific Hazard	N/A	

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Dialuminium chloride pentahydroxide	12042-91-0	90-100%	Not Available

### 4 FIRST AID MEASURES

**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Inhalation:** If inhaled, remove to fresh air. Get medical advice/attention.  
**Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing/shoes. Seek medical advice/attention if necessary.  
**Ingestion:** Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Seek medical attention and show safety data sheet or label.

### 5 FIRE-FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:** May be combustible at high temperature. Use appropriate media (water spray jet, foam) for adjacent fire. Do not use high volume water jet.  
**Special protective equipment & precautions for firefighters:** Cool endangered containers with water spray jet. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not disperse powdered product in air. Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**Flash Points:** Not applicable  
**Specific hazards arising from the chemical:** In case of fire hazardous decomposition products may be produced such as hydrogen chloride. See also Stability and Reactivity section.

## 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment & emergency procedures:** Ensure adequate ventilation. Wear suitable protective equipment. Keep away sources of ignition. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.

**Environmental precautions:** Collect contaminated fire extinguishing water separately. This must not be discharged into drains. The product should not be allowed to enter drains, water courses, or the soil. Notify environmental authorities in case of large leaks.

**Methods and material for containment and cleaning up:** Take up mechanically. Avoid dust formation. Take measures to prevent the buildup of electrostatic charge. Risk of dust explosion. Treat recovered material as described in Section 13.

## 7 HANDLING & STORAGE

**Precautions for safe handling:** Dust can form and explosive mixture in air. Keep away sources of ignition. Take precautionary measures against buildup of electrostatic charges, e.g., earthing during loading and off-loading operations. Observe the general rules of industrial fire protection. Handle and open container with care. Avoid dust formation. Avoid dust accumulation in enclosed space. Provide adequate ventilation. See section 8 for recommendations on the use of personal protective equipment. Keep container closed when not in use.

**Conditions for safe storage, incl. any incompatibilities:** Keep only in the original container. Store in cool, dry well-ventilated area. Keep away from heat and incompatible materials (see section 10 for incompatibilities). Do not store or transport together with foodstuffs.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Aluminum Chlorohydrate	10 mg/m <sup>3</sup>	Permissible exposure limit (dust, nuisance dust, particulates)	California Permissible Exposure Limits
	15 mg/m <sup>3</sup>	TWA (8h) (inert or nuisance dust)	US OSHA Table Z-3
	50 million particles/ft <sup>3</sup>	TWA (inert or nuisance dust)	US OSHA Table Z-3
	10 mg/m <sup>3</sup>	TWA (particulates (insoluble or poorly soluble))	US ACGIH Threshold Limit Values
	10 mg/m <sup>3</sup>	TEEL-0 (particulate material (PNOS))	AIHA. ERPG and TEEL Table 2
	30 mg/m <sup>3</sup>	Based on the applicable AEGL-1, ERPG-1, or TEEL-1 value (particulate material (PNOS))	AIHA. ERPG and TEEL Table 2
	50 mg/m <sup>3</sup>	Based on the applicable AEGL-2, ERPG-2, or TEEL-2 value (particulate material (PNOS))	AIHA. ERPG and TEEL Table 2
	250 mg/m <sup>3</sup>	Based on the applicable AEGL-3, ERPG-3, or TEEL-3 value (particulate material (PNOS))	AIHA. ERPG and TEEL Table 2
	5 mg/m <sup>3</sup>	PEL TWA (particulates not otherwise regulated)	US NIOSH Pocket Guide to Chemical Hazards
	IDLH value has not been determined for this substance	Immensely Dangerous to Life or Health (particulates not otherwise regulated)	US NIOSH Pocket Guide to Chemical Hazards
	10 mg/m <sup>3</sup>	PEL (particulates not otherwise regulated)	California Permissible Exposure Limits
	15 mg/m <sup>3</sup>	Final Rule Limit TWA (particulates not otherwise regulated)	29 CFR 1910.1000 Table Z-1-A (Revoked)
	15 mg/m <sup>3</sup>	Transitional Limits - PEL (particulates not otherwise regulated)	29 CFR 1910.1000 Table Z-1-A (Revoked)

15 mg/m<sup>3</sup>  
15 ppm

regulated)  
TWA (8h) (particulates not  
otherwise regulated (PNOR))

US OSHA Table Z-1 Limits for Air  
Contaminants [29 CFR 1910.1000]

TWA: Time Weighted Average over 8 hours of work.  
TLV: Threshold Limit Value over 8 hours of work.  
REL: Recommended Exposure Limit  
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.  
IDLH: Immediately Dangerous to Life or Health  
WEEL: Workplace Environmental Exposure Levels  
CEIL: Ceiling

### Personal Protection:

- Eyes:** Depending on the risk, wear sufficient eye protection (safety glasses with side protection or goggles, and if necessary, face shield).
- Inhalation:** Local ventilation to keep levels below established threshold values is recommended. In case of prolonged exposure to airborne dust concentrations, a suitable particle filter mask that complies with the requirements of national legislation is recommended, depending on the expected exposure levels.
- Body:** Chemical resistant gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time). Wear suitable protective clothing.
- Other:** Observe the usual precautions for handling chemicals. Avoid contact with skin and eyes. Do not breathe dust. Wash hands before breaks and at the end of the workday. Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink, or smoke when handling this product. Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Powder	<b>Vapor Pressure:</b>	0.001 Pa (20 °C)
<b>Odor:</b>	Odorless	<b>Vapor Density:</b>	Not applicable.
<b>Odor Threshold:</b>	No data available	<b>Evaporation Rate:</b>	Not applicable.
<b>Color:</b>	White	<b>Flammability:</b>	Not flammable.
<b>Molecular Weight:</b>	No data available	<b>Upper/lower Explosive Limit:</b>	Not applicable.
<b>pH:</b>	Approx. 4.2 (150 g/L @ 20 °C)	<b>Flash Point:</b>	Not applicable.
<b>Boiling Point:</b>	400 °C	<b>Specific Gravity:</b>	No data available
<b>Melting Point:</b>	No data available	<b>Solubility in Water:</b>	>1,000 g/L (20 °C)
<b>Relative Density:</b>	Approx. 1.9 (20 °C)	<b>Auto-Ignition Temperature:</b>	Not applicable.
<b>Partition Coefficient: n-octanol/water:</b>	No data available	<b>Decomposition Temperature:</b>	>100 °C
<b>Viscosity:</b>	Not applicable.	<b>Explosive Properties:</b>	In case of inappropriate handling: risk of dust explosion
<b>Oxidizing Properties:</b>	Not oxidizing.	<b>Freezing Point:</b>	No data available
<b>Density:</b>	Approx. 1.9 g/cm <sup>3</sup> (20 °C)	<b>Bulk Density:</b>	Approx. 600 kg/m <sup>3</sup>
<b>Surface Tension:</b>	Not applicable.	<b>Molecular Weight:</b>	Not applicable.

## 10 STABILITY AND REACTIVITY

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Stable.
<b>Hazardous Polymerization:</b>	No dangerous reaction known under conditions of normal use. Potential dust explosion hazard.
<b>Conditions to Avoid:</b>	Avoid contact with strong oxidizing agents, strong alkalis, zinc, and reactive metals such as aluminum and magnesium.
<b>Incompatible Materials:</b>	Not known.
<b>Hazardous Decomposition Products:</b>	Hydrogen chloride.

## 11 TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	No data available
<b>Skin:</b>	LD50: >2,000 mg/kg
<b>Eyes:</b>	No eye irritation.
<b>Respiratory:</b>	Not available.
<b>Ingestion:</b>	LD50: 9,187 mg/kg

<b>Carcinogenicity:</b>	Not listed as carcinogen by IARC, OSHA, or NTP.
<b>Teratogenicity:</b>	No data available
<b>Germ Cell Mutagenicity:</b>	Test type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) Strain: NMRI Method: OECD Test Guideline 474 Remarks: negative
<b>Embryotoxicity:</b>	Test type: In vitro gene mutation study in bacteria Metabolic activation: with and without Method: OECD Test Guideline 471 Result: negative Remarks: Read-across (Analogy) Test type: In vitro gene mutation study in mammalian cells Metabolic activation: with and without Method: OECD Test Guideline 476 Result: negative Remarks: Read-across (Analogy)
<b>Specific Target Organ Toxicity:</b>	No data available
<b>Reproductive Toxicity:</b>	NOAEL: 1,000 mg/kg F1: 1,000 mg/kg Method: OECD Test Guideline 422
<b>Respiratory/Skin Sensitization:</b>	No data available
<b>Corrosivity:</b>	No skin irritation.
<b>Sensitization:</b>	Non-sensitizing.
<b>Irritation:</b>	No skin irritation.
<b>Repeated Dose Toxicity:</b>	NOAEL: 200 mg/kg LOAEL: 1,000 mg/kg Method: OECD Test Guideline 422

## 12 ECOLOGICAL INFORMATION

### Ecotoxicity

<b>Aquatic Vertebrate:</b>	LC50: >100 mg/L ( <i>Danio rerio</i> ) (96h) (OECD Test Guideline 203) NOEC: 13 µg/L
<b>Aquatic Invertebrate:</b>	NOEC: >160 mg/L ( <i>Daphnia magna</i> ) (48h) (OECD Test Guideline 202) Remarks: Read-across (Analogy) NOEC: 15 mg/L ( <i>Ceriodaphnia spec.</i> ) (7d) Remarks: Read-across (Analogy)
<b>Terrestrial:</b>	EC50: 14 mg/L ( <i>Pseudokirchneriella subcapitata</i> ) (72h) (OECD Test Guideline 201) Remarks: Read-across (Analogy) EC50: >100 mg/L (activated sludge of a predominantly domestic sewage) (3h) (OECD Test Guideline 209) Remarks: Read-across (Analogy)
<b>Persistence and Degradability:</b>	No data available
<b>Bioaccumulative Potential:</b>	No data available
<b>Mobility in Soil:</b>	No data available
<b>PBT and vPvB Assessment:</b>	This substance is not identified as a PBT or a vPvB.
<b>Other Adverse Effects:</b>	No data available
<b>Additional Ecological Information:</b>	The product should not be allowed to enter drains, water courses, or the soil. Avoid release to the environment. Product does not contain any organic bound Halogens which could lead to AOX-values.

## 13 DISPOSAL CONSIDERATIONS

<b>Waste Residues:</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.
<b>Product Containers:</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

## 14 TRANSPORT INFORMATION

<b>DOT (Dept. of Transportation, USA):</b>	Not restricted.
<b>TDG (Transportation of Dangerous Goods, Canada):</b>	No data available
<b>IMDG (International Maritime Dangerous Goods):</b>	Not restricted.
<b>IATA (International Air Transport Association):</b>	Not restricted.
<b>ICAO (International Civil Aviation Organization):</b>	No data available

## 15 REGULATORY INFORMATION

<b>TSCA Inventory Status:</b>	On TSCA inventory.
<b>DSCL (EEC):</b>	No data available
<b>WHMIS (Canada):</b>	No data available
<b>DSL (Canada):</b>	No data available
<b>EU EINECS/ELINCS/NLP:</b>	No data available
<b>China IECSC:</b>	No data available
<b>China IECIC (06.30.2014):</b>	No data available
<b>Australia AICS:</b>	No data available
<b>Japan ENCS:</b>	No data available
<b>Philippines PICCS:</b>	No data available
<b>Korea KECI:</b>	No data available
<b>New Zealand NZIoC:</b>	No data available
<b>CERCLA Reportable Quantity:</b>	This material does not contain any components with a CERCLA RQ.
<b>SARA 311/312 Hazards:</b>	No SARA Hazards
<b>SARA 302:</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
<b>SARA 313:</b>	This product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.
<b>Clean Water Act:</b>	This product does not contain any Hazardous Substances listed under the US Clean Water Act, Section 311, Table 116.4A.

## 16 OTHER INFORMATION

<b>Revision Date:</b>	15-Dec-2021
<b>Compliance:</b>	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
<b>Disclaimer:</b>	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.