ELEMENTIS

A global specialty chemicals company

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

Revision date: 04-Jan-2024 **Supercedes:** 30-Aug-2018 **SDS Number:** 13731

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: ALE CHLORHYDROL 50 Aluminum Chlorohydrate, USP

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use Description: Formulation additive
Caution: For manufacturing, processing, or repacking

Percent Anhydrous: 40%

1.3. Details of the supplier of the safety data sheet

Supplier:

Elementis SRL, Inc.
469 Old Trenton Road
East Windsor, NJ 08512
USA
Tel: +1-609-443-2000
Fax: +1 609 443 2422

Elementis UK Ltd.
c/o Elementis GmbH
Stolberger Str. 370
50933 Cologne, Germany
Tel: +49 (0) 221 2923 2000

For further information, please contact

E-mail address: Product_stewardship@elementis.com

1.4. Emergency telephone number:

For Chemical Emergency ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at: 000-800-100-7141 (India) or +1-703-527-3887

Emergency telephone number:

Europe: 112
National Poisons Information Service (NPIS): +44 (0)344 892 0111
Poisons Information Centre of Ireland: +353 (0)1 809 2166

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008
Not classified

2.2. Label Elements

Signal Word **None**

2.3. Other Hazards

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

General Hazards: None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 mixtures

Hazardous components, or components with exposure limits (see section 8)

Chemical Name	Weight percent	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Aluminum chloride hydroxide (Al2Cl(OH)5) 12042-91-0	25 - 50 %	01-2119533142-53-XXXX	234-933-1	-			

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
Not applicable

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice: Show this safety data sheet to the doctor in attendance. Get medical attention immediately if symptoms occur.

Inhalation: If breathing is difficult, give oxygen. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: If a person feels unwell or symptoms of skin irritation appear, consult a physician. Wash off immediately with soap and plenty of water.

Eye contact: If eye irritation persists, consult a specialist. Rinse immediately carefully and thoroughly with

	eye-bath or water.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, seek medical advice immediately and show this SDS or label.
Protection of first-aiders:	Avoid contact with skin and eyes.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	None.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.

Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2)
Dry powder
Dry sand
Alcohol-resistant foam
Use water spray or fog; do not use straight streams

Extinguishing media which must not be used for safety reasons
Do not use a solid water stream as it may scatter and spread fire

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
None in particular

Unusual Fire and Explosion Hazards:
May emit toxic fumes under fire conditions

Hazardous combustion products
Gaseous hydrogen chloride (HCl)

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Keep people away from and upwind of spill/leak. Use personal protective equipment.
Other Information:	See Section 12 for more information.

6.2. Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Clean-up methods: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use neutralizing agents. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.4. Reference to other sections

- See Section 12 for additional information.
- See section 8 for more information
- See section 13 for more information

Section 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Safe handling Avoid contact with skin, eyes and clothing. Avoid breathing mists, dusts, or vapors. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Do not freeze. Keep containers tightly closed in a cool, well-ventilated place. Keep product and empty container away from heat and sources of ignition. Keep at temperatures below 60 °C.

Additional Storage: Unsuitable materials: steel, light- and brass alloys
Carbon steel
Suitable material:
Stainless steel
Plastic drum

7.3. Specific end uses:

Exposure scenario: No information available.

Other guidelines: No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits Occupational Exposure Limit for Hazardous Agents in the Workplace

Chemical Name	EU	United Kingdom	France	Spain	Germany
Aluminum chloride hydroxide (Al2Cl(OH)5) 12042-91-0		WEL Long-term value: 2 mg/m³			

Derived No Effect Level (DNEL) Long term exposure

Chemical Name	Oral - Workers	DN(M)EL Oral - Workers	Dermal - Workers	DN(M)EL Dermal - Workers	Inhalation - Workers	DN(M)EL Inhalation - Workers
Aluminum chloride hydroxide (Al2Cl(OH)5)					7.1 mg/m³	
Chemical Name	**Oral - Consumer**	**DN(M)EL Oral - Consumer**	**Dermal - Consumer**	**DN(M)EL Dermal - Consumer**	**Inhalation - Consumer**	**DN(M) Inhalation - Consumer**
Aluminum chloride hydroxide (Al2Cl(OH)5)	1.2 mg/kg bw/day					

Predicted No Effect Concentration (PNEC)

Chemical Name	Fresh Water	Sea Water	Fresh Water Sediment	Sea sediment	Soil	Impact on Sewage Treatment
Aluminum chloride hydroxide (Al2Cl(OH)5)	0.0003 mg/L	0.00003 mg/L				20 mg/L

8.2. Exposure controls

Engineering measures: Maintain adequate engineering controls and/or ventilation to keep hazardous ingredients below their statutory limits. Use an approved respirator whenever exposure limits are exceeded

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Personal protective equipment

Eye/face protection Safety glasses

Hand protection Rubber gloves, Neoprene gloves. The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Skin and body protection Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Environmental Exposure Controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Fluid
Colour: White to light yellow
Odour: Weak
Odour Threshold No data available

Property	Values	Remarks / • Method
pH	4	@ 20 °C (68 °F)
Melting point/range:	No data available	
Freezing point:	No data available	
Boiling Point/Range	110-115 °C (230-239 °F)	
Flash Point	No data available	
Evaporation rate	No data available	
Explosion limits:	No data available	
Vapour pressure	ca. 23 hPa (ca. 17 mm Hg)	@ 20 °C (68 °F)
Vapour density	No data available	

Density:	1.34 g/cm³ (11.182 lbs/gal)	@ 20 °C (68 °F)
Water solubility	Completely miscible	
Solubility in other solvents	No data available	
Partition coefficient: n-octanol/water	ca. -2 log POW	
Autoignition temperature	Not self-igniting	
Decomposition temperature	No data available	
Viscosity:	10 mPas	@ 20 °C (68 °F)

Explosive properties: Not explosive.
Oxidising Properties No data available

9.2. Other information

Bulk Density No data available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity: No dangerous reaction known under conditions of normal use

10.2. Chemical Stability Stable under recommended storage conditions

10.3. Possibility of hazardous reactions: None known.

10.4. Conditions to avoid: Heat, flames and sparks

10.5. Incompatible Materials Contact with metals (aluminium, zinc, tin) may release hydrogen gas

10.6. Hazardous decomposition products: None reasonably foreseeable

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product Information Data obtained on this product or a similar product

Local effects

Inhalation: No data available.

Eye contact: No eye irritation. (OECD 405).

Skin contact: No skin irritation. (OECD 404).

Ingestion No data available.

Target organ effects: None.

Component Information

Chemical Name	LD50/Oral	LD50/Dermal	LC50/inhalation

Aluminum chloride hydroxide (Al2Cl(OH)5)	9187 mg/kg (Rat)	> 2000 mg/kg (Rat)	

Chronic Toxicity

Corrosivity No data available.

Sensitisation Not a skin sensitiser. (OECD 406).

Mutagenic effects No data available.

Reproductive Toxicity: No data available.

Carcinogenicity: There are no known carcinogenic chemicals in this product.

Other adverse effects: No data available.

11.2. Information on other hazards
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information: The data listed, below, is based on this or a similar product:.

LC50 > 1000 mg/l (Danio rerio)

EC50/96hr/48hr/24hr: 98 mg/l (Daphnia magna)

No Observable Effect Concentration/96hr/ 48hr/24hr (NOEC) > 1000 mg/l (Danio rerio)
40 mg/l (Daphnia magna)

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Aluminum chloride hydroxide (Al2Cl(OH)5)	EC50: 14 mg/L (72h)	LC50: > 100mg/L (Danio Rerio; 96h)	EC50: 48 mg/L (48h)

Chemical Name	LC50	EC50	Bioaccumulation Concentration Factor	No Observable Effect Concentration/96hr/ 48hr/24hr (NOEC)
Aluminum chloride hydroxide (Al2Cl(OH)5)	100 - 500 mg/L (Brachydanio rerio; 96 h static)			

12.2. Persistence and degradability Not inherently biodegradable.

12.3. Bioaccumulative potential Does not bioaccumulate

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very

persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects:

General Note: Do not allow product to reach ground water, water course or sewage system.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products: Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with federal, state and local regulations.

EWC waste disposal No: According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Further Information: Waste codes should be assigned by the user based on the application for which the product was used

Contaminated packaging Empty containers should be taken to local recyclers for disposal

Section 14: TRANSPORT INFORMATION

Surface Shipments in Europe (ADR/RID): Not regulated

International Air Transport Association (IATA) Not regulated

International Maritime Dangerous Goods (IMDG) Not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations
For purchases from Elementis EU legal entities, all ingredients are currently registered or exempt under REACH. For purchases from non-EU Elementis legal entities with the intention to export into the EU, please contact your Elementis representative/local office.

International Inventories

USA (TSCA)	Complies
EU (EINECS)	Complies
EU REACH:	Complies
Canada (DSL)	Complies
CANADA (NDSL)	Not applicable
JAPAN (ENCS):	Complies
PHILIPPINES (PICCS):	Complies
KOREA (KECL)	Complies
China (IECSC)	Complies
AUSTRALIA (AICIS)	Complies
NEW ZEALAND (NZIoC):	Complies

TAIWAN (TCSI) Complies

Restriction on marketing use: None known

15.2. Chemical Safety Assessment
No information available

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

Section 16: OTHER INFORMATION

GHS / CLP

Prepared by Product Stewardship
Revision Date 04-Jan-2024
Supercedes: 30-Aug-2018

Reason for revision: (M)SDS sections updated, 1.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

The information provided in this Safety Data Sheet is correct to the best of ELEMENTIS' knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific product designated and may not be valid for such product when used in combination with any other material or in any process, unless specified in this SDS. ELEMENTIS specifically disclaims any liability for any loss, injury or damage which may result from use or misuse of this product.

All chemicals should be handled only by competent personnel, within a controlled environment. It is the buyer's/user's responsibility to ensure that his activities comply with all applicable federal, state, provincial and local laws, and to determine the conditions necessary for the safe use of this product. ELEMENTIS urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product.

End of Safety Data Sheet