**TOWN OF DENTON**
**4 N. 2nd STREET, DENTON, MD 21629**

# BULK CHEMICALS FOR WATER AND WASTEWATER TREATMENT REQUEST FOR PROPOSALS

## ADDENDUM 01

August 15, 2025

## PURPOSE

Please be advised that the Town of Denton has issued an addendum for the Bulk Chemicals Purchase RFP.

The bid due date remains Friday, September 5th, 2025, at 2:00pm.

The attention of prospective bidders is directed to the following questions received and associated responses regarding the Request for Proposals. The Bidder is responsible for notifying their Subcontractors regarding items covered by all Addenda.

## QUESTIONS RECEIVED & RESPONSES

1. Question: Could you provide a 2024 Bid Tabulation?
   **Response: We do not have a 2024 Bid Tabulation.**

2. Question: If our primary business offices are outside of 100 miles we are prohibited from bidding?
   **Response: Per the original RFP, yes, the primary business address cannot be located more than 100 miles from Denton, Maryland. However, we have updated this distance to 150 miles.**

3. Question: Do all sites accept full size tractor trailers?
   **Response: No**

4. Question: Tank sizes Methanol and Aluminum Chloride at WWTP?
   **Response: Methanol – 1,000 gallons; Aluminum Chloride – 6,000 gallons**

5. Question: Tank sizes for all (3) Sodium hypochlorite tanks?
   **Response: 165 gallons**

6. Question: Do all sites have eye washes and safety showers and what is their proximity?
   **Response: Yes**

7. Question: Is there grounding at the methanol site?
   **Response: Yes**

8. Question: What length hose is required for delivery of all materials?
   **Response: This information is to be confirmed by the bidder dependent on their needs.**

9. Question: Who is currently supplying these materials?
   **Response: Hawkins, Inc.**

10. Question: Can you provide the previous bid tabulation prices?
    **Response: We do not have previous bid tabulations.**

11. Question: Are all prices firm for the three-year period or can we request an increase after (1) year?
    **Response: Prices are firm for the three-year period.**

12. Question: Is the extension at the sole option of the Town of Denton and must all prices, terms and conditions remain the same?
    **Response: Both the Town of Denton and the applicable company are to be in agreement for consideration of an extension. Terms and conditions are to remain the same, however pricing may be reevaluated.**

13. Question: Can you provide a technical data sheet or specs for the aluminum chloride?
    **Response: Yes, see attached certificate of analysis.**

14. Question: Do you plan on awarding this to the lowest bidder for each individual material or are you awarding this to the lowest overall bidder?
    **Response: We are currently evaluating the possibility of awarding by individual material rather than awarding to the lowest overall bidder. Final award decisions will be based on a combination of pricing, vendor qualifications, and overall value, depending on what is in the best interest of the Town.**

15. Question: There are many different options for aluminum chloride solution or poly aluminum chloride solutions. We wouldn't know what material to bid without the specifications of what you require or are currently using?
    **Response: We require straight aluminum chloride, not any other variation. See attached SDS and certificate of analysis.**

16. Question: Is this aluminum chloride 28% 32B? Does it need to NSF?
    **Response: It is used for phosphorus reduction in wastewater. See attached certificate of analysis.**

17. Question: Is there any way someone from the treatment plant can provide a certificate of analysis for the aluminum chloride they are receiving? Do you require the material to be NSF?
    **Response: See attached certificate of analysis.**

18. Question: Is the bidder required to bid on all 3 materials?
    **Response: No, the bidder is not required to bid on all 3 materials.**

19. Question: How is the product received, drums, totes, transferred to a tank?
    **Response:** **a. Sodium Hypochlorite has been delivered in 330 gal. totes from a flatbed truck.**
    **b. Methanol has been delivered in tractor trailer though difficult to maneuver around the plant.**
    **c. Aluminum Chloride is delivered by tractor trailer.**

20. Question: If transferred to a tank, what size tank at each location?
    **Response:** **a. Methanol – 1,000 gallons**
    **b. Aluminum Chloride – 6,000 gallons**
    **c. Sodium Hypochlorite – 165 gallons**

21. Question: What is the minimum delivery quantity delivered to each location?
    **Response: They call when needed.**
    **Sodium Hypochlorite ~100 gals.**
    **Methanol ~700 gals.**
    **Alum Chloride ~4,000 gals.**

22. Question: Does the WWTP site with 6,000-gallon tank accept full size tractor trailers?
    **Response: Yes.**

23. Question: What is the typical delivery volume you receive of Aluminum Chloride? Is a FTL of 4,000 gallons?
    **Response: Yes.**

**RFP REVISIONS**

1. Section C Information to Bidders, Item C.3 Qualifications – Revise the following sentence "Primary business address cannot be located more than 100 miles from Denton, Maryland" to "**Primary business address cannot be located more than 150 miles from Denton, Maryland."**

**ATTACHMENTS**

1. SDS and Certificate of Analysis for the aluminum chloride currently being provided.

*** END OF ADDENDUM NO. 01 ***

ChemicalBook

# Chemical Safety Data Sheet MSDS / SDS

# Aluminum chloride

Revision Date:2025-02-01 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

| | |
|---|---|
| Product name | : Aluminum chloride |
| CBnumber | : CB6247076 |
| CAS | : 7446-70-0 |
| EINECS Number | : 231-208-1 |
| Synonyms | : AlCl3,aluminum chloride |

### Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| Relevant identified uses | : For R&D use only. Not for medicinal, household or other use. |
| Uses advised against | : none |

### Company Identification

| | |
|---|---|
| Company | : Chemicalbook |
| Address | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing |
| Telephone | : 400-158-6606 |

## SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word Danger

**Precautionary statements**

P201 Obtain special instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container to.....

**Hazard statements**

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H351 Suspected of causing cancer

H372 Causes damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

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## SECTION 3: Composition/information on ingredients

### Substance

| | |
|---|---|
| Product name | : Aluminum chloride |
| Synonyms | : AlCl3,aluminum chloride |
| CAS | : 7446-70-0 |
| EC number | : 231-208-1 |
| MF | : AlCl3 |
| MW | : 133.34 |

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## SECTION 4: First aid measures

### Description of first aid measures

**General advice**

Consult a physician. Show this material safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

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

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of any immediate medical attention and special treatment needed

No data available

### Notes to physician

No data available

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## SECTION 5: Firefighting measures

### Extinguishing media

**Suitable extinguishing media**

Dry powder Dry sand

**Unsuitable extinguishing media**

Do NOT use water jet.

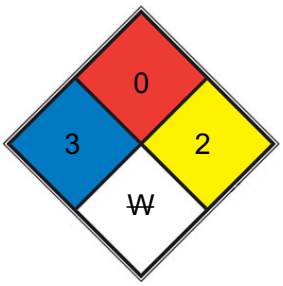
### Special hazards arising from the substance or mixture

Hydrogen chloride gas Aluminum oxide

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### NFPA 704




| | | | |
|---|---|---|---|
| ■ | HEALTH | 3 | Short exposure could cause serious temporary or moderate residual injury (e.g. liquid hydrogen, sulfuric acid, calcium hypochlorite, hexafluorosilicic acid) |
| ■ | FIRE | 0 | Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride) |
| ■ | REACT | 2 | Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form explosive mixtures with water (e.g. white phosphorus, potassium, sodium) |
| □ | SPEC. HAZ. | W | |

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

### Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### Precautions for safe handling

### Advice on safe handling

Avoid formation of dust and aerosols.

### Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage.
Store under inert gas. Vent periodically. Handle and open container with care. Reacts violently with water.

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## SECTION 8: Exposure controls/personal protection

### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

### Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as

NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This

recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

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# SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

| | |
|---|---|
| Appearance | light yellow powder |
| Odour | stinging |
| Odour Threshold | No data available |
| pH | 2.4 at 100 g/l at 20 °C |
| Melting point/freezing point | Melting point/range: 190 °C - lit. |
| Initial boiling point and boiling range | 181.2 °C at 1,013 hPa - (ECHA) |
| Flash point | Not applicable |
| Evaporation rate | No data available |
| Flammability (solid, gas) | The product is not flammable. |
| Upper/lower flammability or explosive limits | No data available |

| | |
|---|---|
| Vapour pressure | 1 hPa at 20 °C |
| Vapour density | No data available |
| Relative density | 2.44 |
| Water solubility | 450 g/l at 20 °C - (decomposition) |
| Partition coefficient: n-octanol/water | Not applicable for inorganic substances |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | Viscosity, kinematic: No data available Viscosity, dynamic: No data available |
| Explosive properties | No data available |
| Oxidizing properties | No data available |

### Other safety information

No data available

## SECTION 10: Stability and reactivity

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Reacts violently with water.

### Conditions to avoid

Exposure to moisture.

### Incompatible materials

No data available

### Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### Information on toxicological effects

**Acute toxicity**

LD50 Oral - Rat - 3,450 mg/kg

Remarks: (RTECS) Inhalation

LD50 Dermal - Rabbit - > 2,000 mg/kg Remarks: (RTECS)

**Skin corrosion/irritation**

Skin - Human

Result: Causes burns. Remarks: (IUCLID) Skin - In vitro study Result: Corrosive

(OECD Test Guideline 435)

**Serious eye damage/eye irritation**

Causes serious eye damage. Eyes - Human

Result: Causes burns.

Remarks: (IUCLID)

**Respiratory or skin sensitization**

Patch test: - Human

Result: negative Remarks: (IUCLID)

Sensitisation test: - Guinea pig Result: negative

(OECD Test Guideline 406)

**Germ cell mutagenicity**

Test Type: In vivo micronucleus test Species: Rat

Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 474 Result: negative

Remarks: (in analogy to similar products)

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Toxicity**

LD50 oral (rat) 3730 mg/kg

LD50 skin (rabbit) >2 g/kg

TLV-TWA (ACGIH) 2 mg(Al)/m3

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## SECTION 12: Ecological information

### Toxicity

**Toxicity to bacteria**

### Persistence and degradability

Not applicable for inorganic substances

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### Toxics Screening Level

The initial threshold screening level (ITSL) for Aluminum Chloride is 20 µg/m3 based on an 8 hour averaging time.

### Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### Waste treatment methods

### Product

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Incompatibilities**

A strong reducing agent. Contact with air or water forms hydrochloric acid and hydrogen chloride gas. Reaction with water may be violent. Water, alcohol, and alkenes can cause polymerization. Incompatible with nitrobenzene, organic material, and bases. Attacks metal in presence of moisture, forming flammable hydrogen gas.

**Waste Disposal**

May be sprayed with aqueous ammonia in the presence of ice and, when reaction is complete, flushed down drain with running water.

### Contaminated packaging

Dispose of as unused product.

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## SECTION 14: Transport information

### UN number

ADR/RID: 1726 IMDG: 1726 IATA-DGR: 1726

### UN proper shipping name

ADR/RID: ALUMINIUM CHLORIDE, ANHYDROUS IMDG: ALUMINIUM CHLORIDE, ANHYDROUS

IATA-DGR: Aluminium chloride, anhydrous

### Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA-DGR: 8

### Packaging group

ADR/RID: II IMDG: II IATA-DGR: II

### Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA-DGR: no

### Special precautions for user

Based on chemical properties, choose appropriate tools and conditions of transport. Transporting tools shall be equipped with appropriate and sufficient firefighting equipment and emergency leaking installations. If transporting by road, please go along the specified route.

### Incompatible materials

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## SECTION 15: Regulatory information

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

**Regulations on the Safety Management of Hazardous Chemicals**

China Catalog of Hazardous chemicals 2015:Listed. website: https://www.mem.gov.cn/

**Measures for Environmental Management of New Chemical Substances**

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

EC Inventory:Listed.

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

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## SECTION 16: Other information

### 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

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

【1】CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

【2】ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

【3】ECHA - European Chemicals Agency, website: https://echa.europa.eu/

【4】eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

【5】ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

【6】Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

【7】HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

【8】IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

【9】IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

【10】Sigma-Aldrich, website: https://www.sigmaaldrich.com/

## Other Information

Reacts violently with fire extinguishing agents such as water, foam.NEVER pour water into this substance; when dissolving or diluting always add it slowly to the water.

# CERTIFICATE OF ANALYSIS

## ALUMINUM CHLORIDE SOLUTION

Aluminum Chloride
Facility: Cambridge, MD USA

| | |
|---|---|
| Effective Date | June 9, 2025 |
| Lot Number | 1215324 |
| Al2O3 | 10.860257% |
| Aluminum Chloride | 27.900000% |
| Baume @ 60 F | 32.072207 |
| Free Hydrochloric Acid | 0.131188 % |
| Iron (Fe) | 0.058033 ppm |
| Specific Gravity | 1.284236 |
| Appearance | Clear Solution |

Certified to NSF / ANSI 60