

SAFETY DATA SHEET



Certified to
NSF/ANSI/CAN 60

MUL = 250 mg/L

Revision date 24-Feb-2023

Revision Number 1

1. Identification

Product identifier

Product Name DelPAC® 2500

Other means of identification

Product Code(s) 3250A

UN number or ID number UN1760

Synonyms Water and Wastewater Treatment Coagulant/Flocculant

Recommended use of the chemical and restrictions on use

Recommended use Coagulating and Flocculating agent

Restrictions on use No information available None known

Details of the supplier of the safety data sheet

Supplier Address

G2O Technologies LLC
1 Riverside Way,
Phillipsburg, NJ 08865
+1-800-453-2586 Hours: Monday-Friday
9:00-5:00 CST (Central Standard Time)

Manufacturer Address

USALCO, LLC
2601 Cannery Ave.
Baltimore, MD 21226

Contact Point sds@usalco.com

Emergency Telephone CHEMTREC: (800) 424-9300
Outside USA - +1 (703) 527-3887 collect calls accepted

2. Hazard(s) identification

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Corrosive to metals	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**WARNING****Hazard statements**

Causes skin irritation
Causes serious eye irritation
May be corrosive to metals

**Appearance** Clear to slightly hazy**Physical state** Liquid**Odor** No appreciable odor**Precautionary Statements - Prevention**

Keep only in original packaging.
Wash hands, face and any exposed skin thoroughly after handling. Do not touch eyes.
Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

If eye irritation occurs: Get medical help.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.

If skin irritation occurs: Get medical help.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store in corrosive resistant container with a resistant inner liner.

Other information

May be harmful if swallowed.

3. Composition/information on ingredients**Substance****Synonyms**

Water and Wastewater Treatment Coagulant/Flocculant.

Chemical name	CAS No	Weight-%	Trade secret
Aluminum Chloride Hydroxide Sulfate	39290-78-3	15 - 45%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret. While some components are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document.

4. First-aid measures**Description of first aid measures****General advice**

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

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

(trained personnel should) give oxygen. Call physician immediately.

Eye contact	Immediately flush with plenty of water for at least 20 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek immediate medical attention.
Skin contact	Immediately wash thoroughly with soap and water, remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention if irritation should develop.
Ingestion	Seek medical attention immediately. Give large amounts of water to drink. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms	Skin, eye and respiratory tract irritation. May cause redness and tearing of the eyes. Itching. Burning sensation. Rashes. Redness. Dermatitis. Coughing and/ or wheezing. Difficulty in breathing. Stomach pains.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents. Note: Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
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5. Fire-fighting measures

Suitable Extinguishing Media	Not combustible. Use appropriate extinguishing media for material that is supplying fuel. Use water spray to cool the surrounding area and maintain fire temperature below decomposition temperature. Water Spray, Carbon Dioxide, Foam, Dry Chemical. CAUTION: Use of water spray when fighting fire may be inefficient.
Large Fire	
Unsuitable extinguishing media	No information available.
Specific hazards arising from the chemical	May produce hazardous fumes or hazardous decomposition products.
Hazardous combustion products	Thermal decomposition (as may be experienced in a fire) may produce toxic and/or hazardous gases such as HCl and Cl ₂ as well as oxides of sulfur and carbon.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear suitable protective clothing and gloves.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Soak up small spills with inert absorbent
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material and place in a labeled waste container for disposal. Build dikes as necessary to contain flow of large spills. Do not allow liquid to enter streams or waterways.

Methods for cleaning up

Stop leaks. Clean up spill immediately. Build dikes as necessary to contain flow of large spills. Do not allow liquid to enter stream or waterways. For small spills, use soda ash to neutralize, an inert material to absorb. Place contaminated materials into containers and store in a safe place to await proper disposal. Wear adequate personal protective clothing and equipment. Caution: The use of soda ash may generate carbon dioxide gas. Provide adequate ventilation to spill area. Approved breathing apparatus may be necessary. Clean up large spills with vacuum truck.

Prevention of secondary hazards

Do not permit run-off to get into sewers or surface waterways.

7. Handling and storage

Precautions for safe handling**Advice on safe handling**

Keep container closed when not in use. Keep away from heat and open flame. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Wear chemical splash goggles, gloves, and protective clothing when handling. Avoid breathing vapors or mists. Use with adequate ventilation and employ respiratory protection where mist or vapors may be generated. FOR INDUSTRIAL USE ONLY.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Store in corrosive resistant stainless steel container with a resistant inner liner. Product may slowly corrode iron, brass, copper, aluminum, mild steel, and stainless steel. Store in a cool, dry place away from direct heat. Keep in tightly closed container. Store locked up.

Packaging materials

Store in corrosion resistant container with a resistant inner liner.

8. Exposure controls/personal protection

Control parameters**Exposure Limits**

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Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls**Engineering controls**

Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, 'Industrial Ventilation, A Manual of Recommended Practices', most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

Hand protection

Appropriate chemical resistant gloves should be worn.

Skin and body protection

Standard work clothing and work shoes.

Respiratory protection	If exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134.
Environmental exposure controls	Do not allow liquid to enter streams or waterways.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear to slightly hazy
Color	Colorless to yellow
Odor	No appreciable odor
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2.1 - 2.7	As is
Melting point / freezing point	< -32.2 °C (-26 °F)	None known
Boiling point / boiling range	~ 110 °C (230 °F)	No information available
Flash point	Not applicable No data available	No information available
Evaporation rate	No information available No data available	No information available
Flammability (solid, gas)	Not applicable No data available	No information available
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	No information available
Relative vapor density	No data available	No information available
Relative density	1.26 - 1.32	None known
Water solubility	Soluble below pH 4	No information available
Solubility(ies)	No information available	None known
Partition coefficient	No data available	None known
Autoignition temperature	Not applicable No data available	None known
Decomposition temperature	No information available	None known
Kinematic viscosity	No data available	No information available
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	10.5 - 11.0 lbs./gal.
Bulk density	No information available

10. Stability and reactivity

Reactivity	No data available.
Chemical stability	Stable.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No.
Conditions to avoid	Avoid contact with metals such as iron, brass, copper, aluminum and mild steel.

Incompatible materials Alkalis.

Hazardous decomposition products Thermal decomposition (as may be experienced in a fire) may produce toxic and/or hazardous gases such as HCl and Cl₂ as well as oxides of sulfur and carbon.

11. Toxicological information

Information on likely routes of exposure

Product Information	Specific test data for the substance or mixture is not available.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Eye contact	May cause moderate eye irritation that can become severe with prolonged contact. Prolonged exposure to Aluminum salts may cause conjunctivitis.
Skin contact	Prolonged and/or repeated contact may cause skin irritation.
Ingestion	May cause irritation of the mouth, throat and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing. Eye contact: Adverse symptoms may include the following: watering, redness, and irritation. Skin contact: Adverse symptoms may include the following: irritation and redness. Ingestion: Adverse symptoms may include the following: stomach pains, gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute toxicity

Numerical measures of toxicity

No information available

ATEmix (oral)	18374 mg/kg
ATEmix (dermal)	4004 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum Chloride Hydroxide Sulfate 39290-78-3	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH, or OSHA.
Reproductive toxicity	No information available.
Developmental toxicity	No information available.

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and degradability	Not determined. No information available.
Bioaccumulation	No information available.

Chemical name	Partition coefficient
Aluminum Chloride Hydroxide Sulfate 39290-78-3	<3

Mobility	Not determined. No information available.
Other adverse effects	No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulations.
Contaminated packaging	Since empty containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	Regulated
UN number or ID number	UN1760
Proper shipping name	Corrosive liquid, N. O. S. (Aluminum chloride hydroxide sulfate)
Transport hazard class(es)	8
Packing group	III
Emergency Response Guide Number	154
TDG	Regulated
UN number or ID number	UN1760
UN proper shipping name	Corrosive liquid, N. O. S. (Aluminum chloride hydroxide sulfate)
Transport hazard class(es)	8
Packing group	III
Technical Name Description	Aluminum chloride hydroxide sulfate

IATA	Regulated
UN number or ID number	UN1760
UN proper shipping name	Corrosive liquid, N. O. S. (Aluminum chloride hydroxide sulfate)
Transport hazard class(es)	8
Packing group	III
ERG Code	8L

IMDG	Regulated
UN number or ID number	UN1760
UN proper shipping name	Corrosive liquid, N. O. S. (Aluminum chloride hydroxide sulfate)
Transport hazard class(es)	8
Packing group	III
EmS-No	F-A, S-B

15. Regulatory information

International Inventories

TSCA All ingredients are on the inventory or exempt from listing.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Water	7732-18-5	Present	Active
Aluminum Chloride Hydroxide Sulfate	39290-78-3	Present	Active

DSL/NDSL All ingredients are on the DSL inventory or exempt from listing. None of the ingredients are on the NDSL inventory.

EINECS/ELINCS All ingredients are on the EINECS inventory or are exempt from listing. None of the ingredients are on the ELINCS inventory.

ENCS All ingredients are on the inventory or exempt from listing.

IECSC All ingredients are on the inventory or exempt from listing.

KECL All ingredients are on the inventory or exempt from listing.

PICCS All ingredients are on the inventory or exempt from listing.

AICS All ingredients are on the inventory or exempt from listing.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	Flammability 0	Instability 0	Special hazards CORR
HMIS	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection B

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 24-Feb-2023
Revision Note No information available.
Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a 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 material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet