SAFETY DATA SHEET

Revision date 09-Jun-2021 **Revision Number** 1

1. Identification

Product identifier

Product Name ALPHA 208

Other means of identification

Product Code(s) 40000675

UN number or ID number UN3264

Synonyms Inorganic metal salt coagulant/flocculant in aqueous solution

Recommended use of the chemical and restrictions on use

Recommended use No information available

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)

Contact Point sdsinfo@g2otech.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 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

DANGER

Hazard statements
Causes severe skin burns and eye damage
May be corrosive to metals

Appearance Opaque **Physical state** Liquid **Odor** No appreciable odor

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Keep in original container

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth
Do NOT induce vomiting
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up
Store in corrosion resistant container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
May be harmful if swallowed.

3. Composition/information on ingredients

Substance

Not applicable.

Synonyms Inorganic metal salt coagulant/flocculant in aqueous solution.

Chemical name	CAS No	Weight-%	Trade secret
Trade secret	Trade secret	20 - 30%	*
Trade secret	Trade secret	5 - 10%	*

*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 if irritation or other 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 Remove contact lenses, if worn. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention if irritation should develop.

Skin contact Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and footwear. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Ingestion Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Skin, eye and respiratory irritation. May cause redness and tearing of the eyes. Itching. Dermatitis. Burning sensation. Rashes. Redness. Coughing and/ or wheezing. Difficulty breathing. Stomach pains.

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.

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.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

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 release toxic and/or hazardous gases such as HCl and Cl_2.

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. Do not allow liquid to enter streams or waterways.

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 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.

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 skin, eyes or clothing. Wear chemical splash goggles, gloves, and protective clothing when handling. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Use with adequate ventilation and employ respiratory protection where a dust atmosphere may be generated. Do not take internally. 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 heat. Keep container tightly closed when not in use and during transport.

Packaging materials Store in corrosion resistant container with a resistant inner liner.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Trade secret	-	(vacated) TWA: 2 mg/m³ Al Aluminum	TWA: 2 mg/m³ Al
Trade secret	TWA: 1 mg/m³ Fe	(vacated) TWA: 1 mg/m³ Fe	TWA: 1 mg/m³ Fe

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. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.
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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Opaque
Color	Orange-brown
Odor	No appreciable odor
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	1 - 2	As is
Melting point / freezing point	-50 °C (-58 °F)	None known
Boiling point / boiling range	106 °C (222.8 °F)	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
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	None known
Relative vapor density	No data available	None known
Relative density	1.2 - 1.3	
Water solubility	Soluble below pH 4	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
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	10.0 - 10.8 lbs./gal.
Bulk density	No information available

10. Stability and reactivity

Reactivity Reacts with strong alkalis.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization No.

Conditions to avoid None known.

Incompatible materials Alkalis.

Hazardous decomposition products Thermal decomposition (as may be experienced in a fire) may release toxic and/or hazardous gases such as HCl and Cl_2.

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 spray may irritate respiratory tract and may cause burns and difficulty breathing.

Eye contact Based on pH, this product is expected to cause severe eye irritation, possibly resulting in burns and eye damage. Prolonged exposure to Aluminum salts may cause conjunctivitis.

Skin contact Prolonged and/or repeated contact may cause severe irritation and burns.

Ingestion Harmful if swallowed. May cause burns 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 Adverse symptoms may include the following;

Eye Contact: watering, redness, irritation and possible burns.

Skin contact: irritation, rash, redness, itching, dermatitis, burning sensation and burns.

Ingestion: stomach pain, nausea, vomiting and diarrhea.

Inhalation: Respiratory irritation, coughing, wheezing and difficulty breathing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1,357.10 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade secret	= 380 mg/kg (Rat)	-	-
Trade secret	= 450 mg/kg (Rat)	-	-

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

Skin corrosion/irritation Causes burns.

Serious eye damage/eye irritation Risk of serious damage to eyes.

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.

Target organ effects Eyes, Gastrointestinal tract (GI), Respiratory system, Skin.

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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret	--	LC50 (96 h) 6.2 - 11.9 mg/L (Oncorhynchus mykiss) LC50 (96 h flow-through) 5.31 - 7.2 mg/L (Oncorhynchus mykiss) LC50 (96 h) = 27.1 mg/L (Gambusia affinis)	-	EC50: =3.9mg/L (48h, Daphnia magna)
Trade secret	--	LC50 (96 h semi-static) 20.95 - 22.56 mg/L (Pimephales promelas) LC50 (96 h semi-static) = 20.26 mg/L (Lepomis macrochirus)	-	EC50: =27.9mg/L (48h, Daphnia magna) EC50: =9.6mg/L (48h, Daphnia magna)

Persistence and degradability Not determined. No information available.

Bioaccumulation No information available.

Chemical name	Partition coefficient
Trade secret	-4

Mobility Not determined. No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Do NOT mix with other chemical wastes. Avoid landfilling liquids. Do not put solutions containing this product into sewer systems. Dispose of product in an approved chemical waste landfill or incinerator in accordance with applicable Federal, state and local regulations.

Contaminated packaging Do not reuse empty containers. Since empty containers retain product residue, follow label warnings even after container is emptied.

US EPA Waste Number D002 (Corrosivity).

14. Transport information

DOT Regulated
- **UN number or ID number** UN3264
- **Proper shipping name** Corrosive liquid, acidic, inorganic, N. O. S. (Aluminum chloride solution, Ferric chloride solution)
- **Transport hazard class(es)** 8
- **Packing group** III
- **Emergency Response Guide Number** 154

TDG Regulated
- **UN number or ID number** UN3264
- **UN proper shipping name** Corrosive liquid, acidic, inorganic, N. O. S. (Aluminum chloride solution, Ferric chloride solution)
- **Transport hazard class(es)** 8
- **Packing group** III

MEX
- **Notes** **Contact manufacturer.**
- **Technical Name**

IATA Regulated
- **UN number or ID number** UN3264
- **UN proper shipping name** Corrosive liquid, acidic, inorganic, N. O. S. (Aluminum chloride solution, Ferric chloride solution)
- **Transport hazard class(es)** 8
- **Packing group** III
- **ERG Code** 8L

IMDG Regulated
- **UN number or ID number** UN3264
- **UN proper shipping name** Corrosive liquid, acidic, inorganic, N. O. S. (Aluminum chloride solution, Ferric chloride

	solution)
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
Trade secret	-	Present	Active
Trade secret	-	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).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trade secret	1000 lbs.	-	-	Present

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.

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Trade secret	1000 lbs.	-	RQ 1000 lbs. final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Trade secret	X	X	X
Trade secret	sn 1034	Present	Environmental Hazard

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 3	**Flammability** 0	**Instability** 0	**Special hazards** COR
HMIS	**Health hazards** 3	**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) (AEGL(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	09-Jun-2021
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