SAFETY DATA SHEET

Revision date 03-Jul-2025 **Revision Number** 12

1. Identification

Product identifier

Product Name WS-137

Other means of identification

Product Code(s) 3204J 1

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 Coagulating and Flocculating agent.

Restrictions on use None known.

Details of the supplier of the safety data sheet

Manufacturer Address
Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number
Chemtrec 1-800-424-9300

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

Precautionary Statements - Prevention
Wash hands, face and any exposed skin thoroughly after handling. Do not touch eyes.
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 only in original packaging.

Precautionary Statements - Response
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (See Section 4. First aid measures - Ingestion).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical help.
Take off contaminated clothing and wash it before reuse.
Absorb spillage to prevent material damage.
Absorb spillage to prevent material damage.

Precautionary Statements - Storage
Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information
May be harmful if swallowed.

3. Composition/information on ingredients

Substance

Synonyms Inorganic metal salt coagulant/flocculant in aqueous solution.

Chemical name	CAS No	Weight-%	Trade secret
Trade Secret Ingredient	Trade secret	25 - 35%	*

*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

Inhalation If inhaled, remove to fresh air. Break an amyl nitrate pearl in a cloth and hold under nose for 15 seconds. Repeat five times at 15 minute intervals. If not breathing (trained personnel should) give artificial respiration. Get immediate medical attention. If inhaled, remove to fresh air. If not breathing (trained personnel should) give artificial respiration, preferably mouth-to-mouth. If breathing is difficult (trained personnel should) give oxygen. Get medical attention. Call a physician immediately.

Eye contact In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists. Get medical attention if irritation develops and persists.

Skin contact In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. If skin irritation occurs: Get medical advice/attention.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person. If swallowed, induce vomiting immediately by giving two glasses of water and sticking fingers down throat; never give anything to an unconscious person. Get medical attention. Get medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms May aggravate existing skin, eye, and lung conditions. Persons with kidney disorders have an increased risk from exposure based on general information found on aluminum salts. Possible eye, skin and respiratory tract irritation.

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.

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

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical May produce hazardous fumes or hazardous decomposition products. May react with metals to release flammable hydrogen gas.

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 adequate personal protective clothing and equipment. Approved breathing apparatus may be necessary.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Build dikes as necessary to contain flow of large spills.

Methods for cleaning up Clear spills immediately. 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. Caution: Use of soda ash may generate carbon dioxide gas. Provide adequate ventilation to spill area.

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. Wear chemical splash goggles, gloves, and protective clothing when handling. Wash thoroughly after handling. Avoid breathing vapors or mists. Use with adequate ventilation and employ respiratory protection where mist or spray may be generated. FOR INDUSTRIAL USE ONLY.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool, dry place away from direct heat. Keep container closed when not in use. Do not store in unlined metal containers. Product may slowly corrode iron, brass, copper, aluminum, mild steel, and stainless steel.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

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

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 Use engineering controls as per code of federal regulations, labor part 1910.94. Exhaust ventilation. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses or goggles to protect against exposure. Safety glasses. Safety glasses (with side shields). Face shield. Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

Hand protection Rubber gloves. Appropriate chemical resistant gloves should be worn. Oil-resistant gloves.

Skin and body protection	Wear suitable protective clothing.
Respiratory protection	Use only in well-ventilated areas. Use NIOSH approved dust respirator. 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.
General hygiene considerations	Take off contaminated clothing and wash before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless to yellow
Odor	No appreciable odor
Odor threshold	Not applicable.

Property	**Values**	**Remarks • Method**
pH	2.0 - 3.0	As is
Melting point / freezing point	< -12 °C / 10 °F	
Boiling point / boiling range	~ 104 °C / 220 °F	
Flash point	Not applicable.	
Evaporation rate	Not determined.	
Flammability (solid, gas)	Not applicable.	
Flammability Limit in Air		
Upper flammability or explosive limits	Not applicable.	
Lower flammability or explosive limits	Not applicable.	
Vapor pressure	Not determined.	
Relative vapor density	Not determined.	
Relative density	1.19 - 1.21	
Water solubility	Soluble below pH 4	
Solubility(ies)		
Partition coefficient	Not determined.	
Autoignition temperature	Not applicable.	
Decomposition temperature	Not determined. -	
Kinematic viscosity	Not determined.	
Dynamic viscosity	20 - 10 cps	Brookfield @ 25 °C

Other information

Explosive properties	Not an explosive.
Oxidizing properties	Not expected to be oxidizing based on the chemical structure.
VOC Content (%)	No information available
Liquid Density	9.92 - 10.09 lbs./gal.

10. Stability and reactivity

Reactivity	Reacts with strong alkalis. May react with metals to release flammable hydrogen gas.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No.
Conditions to avoid	Excessive heat. Contact with certain metals produces flammable hydrogen gas.

Incompatible materials Alkalis. Strong bases. Strong oxidizing agents. Metals.

Hazardous decomposition products Thermal decomposition may release toxic and/or hazardous gases such as aluminum, Cl_2, and HCl.

11. Toxicological information

Information on likely routes of exposure

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 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
No information available

The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 5720 mg/kg

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret Ingredient	> 2000 mg/kg (Rat)	-	-

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

Skin corrosion/irritation May cause burns or irritation.

Serious eye damage/eye irritation May cause eye damage or irritation.

Respiratory or skin sensitization No data available.

Germ cell mutagenicity No data 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 data available.

Developmental toxicity No data available.

STOT - single exposure No data available.

STOT - repeated exposure No data available.

Aspiration hazard No data available.

Other adverse effects None known.

Interactive effects None known.

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 Ingredient	-	LC50: =186mg/L (96h, Danio rerio)	-	-

Persistence and degradability Not determined.

Bioaccumulation No information available.

Mobility Not determined.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products . Dispose of in accordance with federal, state and local regulations. Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected. 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** UN3264
- **Proper shipping name** Corrosive liquid, acidic, inorganic, N.O.S. (Polyaluminum chloride solution)
- **Transport hazard class(es)** 8
- **Packing group** III
- **Emergency Response Guide** 154

Number

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

Technical Name
Description Polyaluminum chloride solution.

IATA Regulated
UN number or ID number UN3264
UN proper shipping name Corrosive liquid, acidic, inorganic, N.O.S. (Polyaluminum 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. (Polyaluminum 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 Ingredient	-	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

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable.

16. Other information

NFPA	**Health hazards** 2	**Flammability** 0	**Instability** 0	**Special hazards** COR
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) (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 03-Jul-2025
Revision Note .

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