

Revision date 12-Jun-2023

Revision Number 4

## 1. Identification

### Product identifier

Product Name WS-152

### Other means of identification

Product Code(s) 3245D

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 No information available 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 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** Clear**Physical state** Liquid**Odor** No appreciable odor**Precautionary Statements - Prevention**

Keep in original packaging.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands, face and any exposed skin thoroughly after handling. Do not touch eyes.

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

**Precautionary Statements - Response**

Get emergency medical help immediately.

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

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

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: 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	45 - 55%	*
Trade secret	Trade secret	0.1 - 5%	*
Trade secret	Trade secret	0.1 - 5%	*

\*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.

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen. Call physician immediately.
<b>Eye contact</b>	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.
<b>Skin contact</b>	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.
<b>Ingestion</b>	Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Self-protection of the first aider</b>	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**

<b>Symptoms</b>	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**

<b>Note to physicians</b>	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**

<b>Suitable Extinguishing Media</b>	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.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	No information available.
<b>Specific hazards arising from the chemical</b>	May produce hazardous fumes or hazardous decomposition products.
<b>Hazardous combustion products</b>	Thermal decomposition (as may be experienced in a fire) may release toxic and/or hazardous gases such as HCl and Cl <sub>2</sub> .
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

### **6. Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Wear suitable protective clothing and gloves.
<b>Other information</b>	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/m <sup>3</sup> Al Aluminum	TWA: 2 mg/m <sup>3</sup> Al
Trade secret	TWA: 1 mg/m <sup>3</sup> respirable particulate matter	-	-

#### 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**

<b>Eye/face protection</b>	Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).
<b>Hand protection</b>	Appropriate chemical resistant gloves should be worn.
<b>Skin and body protection</b>	Standard work clothing and work shoes.
<b>Respiratory protection</b>	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.
<b>Environmental exposure controls</b>	Do not allow liquid to enter streams or waterways.
<b>General hygiene considerations</b>	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**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Colorless to yellow
<b>Odor</b>	No appreciable odor
<b>Odor threshold</b>	No information available

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	0.1 - 1.0	As is
<b>Melting point / freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	~ 104 °C (220 °F)	
<b>Flash point</b>	Not applicable No data available	No information available
<b>Evaporation rate</b>	No information available No data available	No information available
<b>Flammability (solid, gas)</b>	Not applicable No data available	No information available
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	No information available
<b>Relative vapor density</b>	No data available	No information available
<b>Relative density</b>	1.366 - 1.387	
<b>Water solubility</b>	Soluble below pH 4	
<b>Solubility(ies)</b>	No information available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not applicable No data available	None known
<b>Decomposition temperature</b>	No information available -	None known
<b>Kinematic viscosity</b>	No data available	No information available
<b>Dynamic viscosity</b>	40 - 65 cps	Brookfield @ 25 °C

**Other information**

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	11.39 - 11.56 lbs./gal.
<b>Bulk density</b>	No information available

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts with strong alkalis.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	No.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	Alkalis.
<b>Hazardous decomposition products</b>	Thermal decomposition (as may be experienced in a fire) may release toxic and/or hazardous gases such as HCl and Cl <sub>2</sub> .

## 11. Toxicological information

### Information on likely routes of exposure

<b>Product Information</b>	Specific test data for the substance or mixture is not available.
<b>Inhalation</b>	Inhalation of mist or spray may irritate respiratory tract and may cause burns and difficulty breathing.
<b>Eye contact</b>	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.
<b>Skin contact</b>	Prolonged and/or repeated contact may cause severe irritation and burns.
<b>Ingestion</b>	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

<b>Symptoms</b>	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	> 2000 mg/kg ( Rat )	-	-
Trade secret	= 1000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-

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

<b>Skin corrosion/irritation</b>	Causes burns.
<b>Serious eye damage/eye irritation</b>	Risk of serious damage to eyes.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	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.
<b>Reproductive toxicity</b>	No information available.
<b>Developmental toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	Eyes, Gastrointestinal tract (GI), Respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	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: =186mg/L (96h, Danio rerio)	-	-
Trade secret	--	LC50 (96 h static) = 10650 mg/L (Lepomis macrochirus)	-	LC50: 2280000 - 3948000µg/L (48h, Daphnia magna)

**Persistence and degradability** Not determined. No information available.

**Bioaccumulation** No information available.

**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**  
 UN number or ID number Regulated  
 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 Number 154

**TDG**  
 UN number or ID number Regulated  
 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**  
 UN number or ID number Regulated  
 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**  
 UN number or ID number Regulated  
 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	-	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.



<b>KECL</b>	All ingredients are on the inventory or exempt from listing.
<b>PICCS</b>	All ingredients are on the inventory or exempt from listing.
<b>AICS</b>	All ingredients are on the inventory or exempt from listing.

**Legend:**

<b>TSCA</b>	- United States Toxic Substances Control Act Section 8(b) Inventory
<b>DSL/NDSL</b>	- Canadian Domestic Substances List/Non-Domestic Substances List
<b>EINECS/ELINCS</b>	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
<b>ENCS</b>	- Japan Existing and New Chemical Substances
<b>IECSC</b>	- China Inventory of Existing Chemical Substances
<b>KECL</b>	- Korean Existing and Evaluated Chemical Substances
<b>PICCS</b>	- Philippines Inventory of Chemicals and Chemical Substances
<b>AICS</b>	- 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**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b> COR
<b>HMIS</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> 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** 12-Jun-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**