



# SAFETY DATA SHEET

Revision Date 14-Jul-2023

WA11 - AGHS - OSHA

Revision Number 4

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Name** Ammonia Electrode Storage Solution  
**Product No** 951213  
**Pure substance/mixture** Mixture

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

**Recommended Use** Use as laboratory reagent  
**Uses advised against** No Information available  
**Manufacturer, Importer, Supplier** Thermo Fisher Scientific©  
Water and Lab Products  
22 Alpha Road  
Chelmsford, MA 01824, USA  
1-978-232-6000  
**Emergency Telephone** 24 Hour Emergency Phone Number  
CHEMTREC®  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: 1-703-527-3887  
(collect calls accepted)  
**E-mail address** [info.water@thermo.com](mailto:info.water@thermo.com)  
**Made in** USA

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label Elements

#### **Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** Clear

**Physical State** Liquid

**Odor** None

### Precautionary Statements

#### **Storage**

Store in a closed container

#### **Disposal**

Dispose of contents in accordance with all local, regional, national and international guidelines.

#### **Hazards not otherwise classified (HNOC)**

No information available

#### **Other Information**

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Water	7732-18-5	>90.0%
Ammonium Chloride	12125-02-9	0.1 - 1.0%

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### Description of first aid measures

#### **General Advice**

Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

#### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Self-Protection of the First Aider</b>	No special precautions required.

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

<b>Most important symptoms and effects</b>	None reasonably foreseeable
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically
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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available

**Specific Hazards Arising from the Chemical**

No information available.

**Explosion Data**

**Sensitivity to Mechanical Impact** None

**Sensitivity to Static Discharge** None

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information. Vapors may accumulate to form explosive concentrations.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

**Handling**

Wear personal protective equipment/face protection  
Ensure adequate ventilation  
Avoid contact with skin, eyes or clothing  
Avoid ingestion and inhalation

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place  
Store at room temperature in the original container  
Protect from direct sunlight

**Incompatible Products** No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Ammonium Chloride 12125-02-9	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	(Vacated) TWA: 10 mg/m <sup>3</sup> (Vacated) STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>

### Legend

*ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value*

*OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits*

*NIOSH - National Institute for Occupational Safety and Health IDLH - Immediately Dangerous to Life or Health*

### Appropriate engineering controls

**Engineering Measures** None under normal use conditions

### Individual protection measures, such as personal protective equipment

**Eye/face Protection** Wear chemical splash goggles and face shield. If splashes are likely to occur.. Face protection shield.

**Skin and Body Protection** Wear protective gloves/protective clothing.

**Respiratory Protection** None under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Appearance</b>	Clear
<b>Odor</b>	None
<b>Odor Threshold</b>	No information available
<b>pH</b>	6.5
<b>PH Range</b>	5.0 - 8.0

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point/freezing point</b>	No information available	
<b>Boiling Point/Range</b>	~ 100 °C / 212 °F	
<b>Flash Point (High in °C)</b>	N/A	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	

<b>Vapor pressure</b>	No information available
<b>Vapor Density</b>	No information available
<b>Specific Gravity</b>	No information available
<b>Water Solubility</b>	Soluble
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition Temperature</b>	-
<b>Decomposition Temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**Other Information**

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	0
<b>Density</b>	No Information available
<b>Bulk Density</b>	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No Information available

**Chemical Stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

No information available

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	No information available
<b>Eye Contact</b>	No information available
<b>Skin Contact</b>	No information available
<b>Ingestion</b>	No information available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water 7732-18-5	LD50 > 90 mL/kg ( Rat )	-	-
Ammonium Chloride 12125-02-9	LD50 = 1650 mg/kg ( Rat )	LD50 > 2000 mg/kg ( Rat )	-

**Information on Toxicological Effects**

**Symptoms** No information available

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

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed
Ammonium Chloride	12125-02-9	Not listed	Not listed	Not listed	Not listed

**Reproductive Effects** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available

**Numerical measures of toxicity - Product Information**

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Water Flea
Ammonium Chloride 12125-02-9	-	LC50: = 209 mg/L, 96h static (Cyprinus carpio)	-

**Persistence and Degradability**

**Bioaccumulation/ Accumulation**

No information available

**Mobility**

Will likely be mobile in the environment due to its water solubility

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Improper disposal or reuse of this container may be dangerous and illegal

**14. TRANSPORT INFORMATION**

**DOT** Not regulated  
**ICAO** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**United States of America Inventory** Complies  
**CANINV** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

**USINV/ TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CANINV/ DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japanese Existing and New Chemical Substances  
**IECSC** - Chinese 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

**U.S. Federal Regulations**

**SARA 313**

Component	Weight %	SARA 313 - Threshold Values %
Ammonium Chloride - 12125-02-9	0-3	1.0

**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. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium Chloride 12125-02-9	5000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
Ammonium Chloride 12125-02-9	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

<b>Component</b>	<b>New Jersey</b>	<b>Massachusetts</b>	<b>Pennsylvania</b>
Water 7732-18-5	-	-	X
Ammonium Chloride 12125-02-9	X	X	X

**U.S. EPA Label Information**

No information available

**16. OTHER INFORMATION**

**Prepared By** Regulatory Affairs  
**Prepared For** Thermo Fisher Scientific Inc.©  
**Issue Date** No information available  
**Revision Date** 14-Jul-2023  
**Reason for revision** SDS sections updated.

**Disclaimer**

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**End of Safety Data Sheet**