

# SAFETY DATA SHEET ( SDS )

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008, (EU) No. 453/2010

Revision Date 25-Oct-2017

WAI2 - EGHS - EUROPEAN

Revision Number 1

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

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

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

**Recommended Use** Use as laboratory reagent  
**Uses advised against** No Information available

### 1.3. Details of the supplier of the safety data sheet

**Manufacturer, Importer, Supplier** Thermo Fisher Scientific  
Robert-Bosch-Str. 163505  
Langenselbold, GERMANY  
Tel.: +49 (6184) 90-6000

**E-mail address** [info.water@thermo.com](mailto:info.water@thermo.com)

**Made in** USA

**1.4. Emergency telephone number** 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)

**SECTION 2. HAZARDS IDENTIFICATION****2.1. Classification of the substance or mixture****Classification - Mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

**2.2. Label elements****Signal Word**

None

EUH210 - Safety data sheet available on request

**Precautionary Statements**

P202 - Do not handle until all safety precautions have been read and understood

**2.3. Other hazards**

No information available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

Component	EC-No.	CAS-No	Weight %	CLP Classification - Regulation (EC) No 1272/2008	REACH Reg. No
Water	EEC No. 231-791-2	7732-18-5	90 - 100%	-	No information available
Ammonium Chloride	EEC No. 235-186-4	12125-02-9	0 - 10%	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)	No information available

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

Full text of H- and EUH-phrases: see section 16

**SECTION 4: FIRST AID MEASURES****4.1. Description of first aid measures**

<b>General Advice</b>	Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Self-Protection of the First Aider</b>	Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

<b>Most important symptoms and effects</b>	See section 11, See section 2 for more information
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**4.3. Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically
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**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media****Suitable Extinguishing Media**

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

**Unsuitable Extinguishing Media**

No information available

**5.2. Special hazards arising from the substance or mixture**

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

**5.3. Advice for firefighters**

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

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Use personal protective equipment. Evacuate personnel to safe areas.
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**6.2. Environmental precautions**

**Environmental Precautions** Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

### 6.3. 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.

#### **Reference to Other Sections**

Refer to protective measures listed in Sections 7 and 8

See Section 8 for information on appropriate personal protective equipment

See Section 12 for additional Ecological Information

See Section 13 for additional waste treatment information

## **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas.

#### **General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

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

### 7.3. Specific end use(s)

#### **Specific Use(s)**

Use as laboratory reagent

#### **Risk Management Methods (RMM)**

The information required is contained in this Safety Data Sheet.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1. Control parameters

Component	European Union	The United Kingdom	France	Spain	Germany
Ammonium Chloride 12125-02-9	-	STEL: 20 mg/m <sup>3</sup> 15 min TWA: 10 mg/m <sup>3</sup> 8 hr	TWA / VME: 10 mg/m <sup>3</sup> (8 heures).	STEL / VLA-EC: 20 mg/m <sup>3</sup> (15 minutos). TWA / VLA-ED: 10 mg/m <sup>3</sup> (8 horas)	-
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Ammonium Chloride 12125-02-9	-	STEL: 20 mg/m <sup>3</sup> 15 minutos TWA: 10 mg/m <sup>3</sup> 8 horas	-	-	TWA: 10 mg/m <sup>3</sup> 8 timer
Component	Austria	Switzerland	Poland	Norway	Ireland
Ammonium Chloride 12125-02-9	-	TWA: 3 mg/m <sup>3</sup> 8 Stunden	STEL: 20 mg/m <sup>3</sup> 15 minutach TWA: 10 mg/m <sup>3</sup> 8 godzinach	TWA: 10 mg/m <sup>3</sup> 8 timer STEL: 15 mg/m <sup>3</sup> 15 minutter. equal to the standard for nuisance dust	TWA: 10 mg/m <sup>3</sup> 8 hr. fume STEL: 20 mg/m <sup>3</sup> 15 min

**Derived No Effect Level (DNEL)** No information available  
**Predicted No Effect Concentration (PNEC)** No information available

**8.2. Exposure controls**

**Engineering Measures** Showers  
 Eyewash stations  
 Ventilation systems

**Personal protective equipment**

**Eye/face Protection** Wear chemical splash goggles and face shield. If splashes are likely to occur, wear Goggles.  
**Skin and body protection** Wear protective gloves/clothing.  
**Respiratory Protection** No protective equipment is needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls** No information available

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**Physical State** Liquid  
**Appearance** Clear  
**Odor** None  
**Odor Threshold** No information available  
**pH** 6.5  
**PH Range** 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>	No information available	
<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	

**9.2. Other information**

**Softening Point** No information available  
**Molecular Weight** No information available  
**VOC Content(%)** 0  
**Density** No Information available  
**Bulk Density** No information available

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**  
 No information available

**10.2. Chemical stability**  
 Stable under normal conditions

**Explosion Data**  
 Sensitivity to Mechanical Impact None  
 Sensitivity to Static Discharge None

**10.3. Possibility of hazardous reactions**  
 None under normal processing

**10.4. Conditions to avoid**  
 Extremes of temperature and direct sunlight

**10.5. Incompatible materials**  
 No information available

**10.6. Hazardous decomposition products**  
 Thermal decomposition can lead to release of irritating gases and vapors

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**Acute Toxicity**

**Product Information**  
 Product does not present an acute toxicity hazard based on known or supplied 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

**Unknown Acute Toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity.

**Skin Corrosion/Irritation** No information available

**Serious eye damage/eye irritation** No information available

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenic effects** No information available

**Reproductive Effects** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

Aspiration hazard No information available

**SECTION 12. ECOLOGICAL INFORMATION**

**12.1. Toxicity**

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

Component	Freshwater Algae	Freshwater Fish	Water Flea
Ammonium Chloride	-	LC50: = 725 mg/L, 24h (Lepomis macrochirus) LC50: = 209 mg/L, 96h static (Cyprinus carpio)	LC50: = 202 mg/L, 24h (Daphnia magna)

**12.2. Persistence and degradability**

No information available

**12.3. Bioaccumulative potential**

No information available

**12.4. Mobility in soil**

No information available

**12.5. Results of PBT and vPvB assessment**

No information available

**12.6. Other adverse effects**

No information available

**Endocrine Disruptor Information**

No information available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

**Waste from Residues / Unused Products** 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.

**SECTION 14: TRANSPORT INFORMATION**

**IMDG/IMO**

- 14.1 UN-No Not Regulated
- 14.2 Proper Shipping Name Not Regulated
- 14.3 Hazard Class Not Regulated
- 14.4 Packing Group Not Regulated
- 14.5 Marine Pollutant Not Applicable
- 14.6 Special Provisions None
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

**ICAO**

- 14.1 UN-No Not Regulated

14.2 Proper Shipping Name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing Group	Not Regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

**IATA**

14.1 UN-No	Not Regulated
14.2 Proper Shipping Name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing Group	Not Regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**International Inventories**

USINV	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

**15.2. Chemical safety assessment**

A Chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

**SECTION 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed  
H319 - Causes serious eye irritation  
H401 - Toxic to aquatic life  
H411 - Toxic to aquatic life with long lasting effects



**Legend - SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

<b>Prepared By</b>	Regulatory Affairs
<b>Prepared For</b>	Thermo Fisher Scientific Inc.
<b>Issue Date</b>	No information available
<b>Revision Date</b>	25-Oct-2017
<b>Reason for revision</b>	SDS sections updated.

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

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**End of Safety Data Sheet**