



# SAFETY DATA SHEET

Revision Date 20-May-2022

WAI1 - AGHS - OSHA

Revision Number 3

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

### Product Identifier

**Product Name** Ammonium Monitor Reagent

**Product No** 181030

**Pure substance/mixture** Mixture

Contains Acetic Acid

### 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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Flammable liquids	Category 3

### Label Elements

Contains Acetic Acid

### **Emergency Overview**

#### **Danger**

#### **Hazard Statements**

Causes severe skin burns and eye damage  
Flammable liquid and vapor



**Appearance** Clear

**Physical State** Liquid

**Odor** vinegar-like

### Precautionary Statements

#### **Prevention**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Keep container tightly closed  
Do not breathe dust/fume/gas/mist/vapors/spray

#### **Response**

##### **Eyes**

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

##### **Skin**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

##### **Inhalation**

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

##### **Ingestion**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

##### **Fire**

In case of fire: Use CO2, dry chemical, or foam for extinction

#### **Storage**

Store in a well-ventilated place. Keep cool

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No information available

**Other Information**

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Acetic Acid	64-19-7	70 - 80%
Water	7732-18-5	20 - 30%

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

### 4. FIRST AID MEASURES

**First aid measures**

<b>General Advice</b>	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.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. In case of skin reactions, consult a physician.
<b>Inhalation</b>	Remove 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 as required. 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.

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

<b>Most important symptoms and effects</b>	No information available
--	--------------------------

**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically
---------------------------	-----------------------

### 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** Use personal protective equipment as required. For further specification, refer to section 8 of the SDS. Evacuate personnel to safe areas.

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

**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 IDLH
Acetic Acid 64-19-7	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 25 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 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**  
Showers  
Eyewash stations  
Ventilation systems

### 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>	vinegar-like
<b>Odor Threshold</b>	No information available
<b>pH</b>	1.8
<b>PH Range</b>	0.3 - 3.3

<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>	109 °C / 228.2 °F	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
Upper flammability limit:	No information available	
Lower flammability limit:	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>	75
<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>	Causes serious eye damage
<b>Skin Contact</b>	Causes burns
<b>Ingestion</b>	No information available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic Acid 64-19-7	LD50 = 3310 mg/kg ( Rat )	LD50 = 1060 mg/kg ( Rabbit )	LC50 = 11.4 mg/L ( Rat ) 4 h
Water 7732-18-5	LD50 > 90 mL/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
Acetic Acid	64-19-7	Not listed	Not listed	Not listed	Not listed
Water	7732-18-5	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

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

ATEmix (oral)	4413 mg/kg
ATEmix (dermal)	1413 mg/kg
ATEmix (inhalation-dust/mist)	15.2 mg/L

## 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
Acetic Acid 64-19-7	-	LC50: = 75 mg/L, 96h static (Lepomis macrochirus) LC50: = 79 mg/L, 96h static (Pimephales promelas)	EC50: = 65 mg/L, 48h Static (Daphnia magna)

### Persistence and Degradability

No information available

### Bioaccumulation/ Accumulation

No information available

### Mobility

Component	log Pow
Acetic Acid 64-19-7	-0.17

### 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

Component	CAWAST
Acetic Acid 64-19-7	Toxic Corrosive Ignitable

## 14. TRANSPORT INFORMATION

### DOT

UN-No	UN2790
Proper Shipping Name	ACETIC ACID SOLUTION
Hazard Class	8
Packing Group	II

<b>Reportable Quantity (RQ):</b>	(Acetic Acid: RQ (kg)= 2270.00)
<b>Special Provisions</b>	148, A3, A7, A10, B2, IB2, T7, TP2
<b>Shipping Description</b>	UN2790, ACETIC ACID SOLUTION, 8, II
<b>Emergency Response Guide Number</b>	153

**ICAO**

<b>UN-No</b>	UN2790
<b>Proper Shipping Name</b>	ACETIC ACID SOLUTION
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN2790, ACETIC ACID SOLUTION, 8, II

**IATA**

<b>UN-No</b>	UN2790
<b>Proper Shipping Name</b>	ACETIC ACID SOLUTION
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>ERG Code</b>	8L
<b>Description</b>	UN2790, ACETIC ACID SOLUTION, 8, II

**IMDG/IMO**

<b>UN-No</b>	UN2790
<b>Proper Shipping Name</b>	ACETIC ACID SOLUTION
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>EmS No.</b>	F-A, S-B
<b>Description</b>	UN2790, ACETIC ACID SOLUTION, 8, II

## 15. REGULATORY INFORMATION

**International Inventories**

<b>United States of America Inventory</b>	Does not Comply
<b>CANINV</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**USINV/ TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CANINV/ DSL/NDL** - 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**

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. 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
Acetic Acid 64-19-7	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
Acetic Acid 64-19-7	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**

Component	New Jersey	Massachusetts	Pennsylvania
Acetic Acid 64-19-7	X	X	X
Water 7732-18-5	-	-	X

**U.S. EPA Label Information**

No information available

**16. OTHER INFORMATION**

<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>	20-May-2022
<b>Reason for revision</b>	SDS sections updated.

**Disclaimer**

IMPORTANT: The information contained in this SDS is correct to the best of our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties of any kind as to the accuracy or completeness of the information contained herein or the merchantability or fitness of the product or this information for a particular purpose. It is the responsibility of each individual buyer/user to determine the suitability of this information and the product for its intended purposes. Product sales are subject to Thermo Fisher Scientific's standard terms and conditions of sale. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions, or is altered in any way. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable government requirements. Since conditions of use of the product are not under direct control of Thermo Fisher Scientific, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Thermo Fisher Scientific will not be liable for any injuries or damages resulting from handling, use, misuse or contact with the product.

**End of Safety Data Sheet**