SAFETY DATA SHEET

This safety data sheet complies with the requirements of: GB/T 17519-2013 and GB/T 16483-2008

Issue Date 11-Sep-2018 **Version** 6 **Revision Date** 05-Jul-2024 **Page** 1 / 12

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name Ammonia Electrode Conditioning Solution

Other means of identification
Product Code(s) 2541249
Safety data sheet number M00934

Alternate CAS Number Not applicable

Other Information
Not applicable

Details of the supplier of the safety data sheet

Supplier Address
HACH CHINA Room 502，Floor 5, No. 38, Yinglun Road, China (Shanghai), Pilot Trade Zone Tel: 400-686-8899, 800-840-6026

Manufacturer Address
Hach Company, P.O. Box 389, Loveland, CO 80539, USA,
+1(970) 669-3050

Emergency Telephone - China
400-007-0792 - 24 Hour Service

Recommended use of the chemical and restrictions on use

Recommended Use Electrode storage solution.

Uses advised against None.

Restrictions on use None.

Section 2: HAZARDS IDENTIFICATION

Appearance aqueous solution **Physical state** Liquid. **Odor** Odorless

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

Label elements

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

Physical Hazards
Not applicable.

Health hazards
Immediate Health Effects: Not applicable.
Chronic effects: Not applicable.

Environmental hazards
This material is a water pollutant. Keep out of drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination. Hazardous to the ozone layer.

Other hazards which do not result in classification
Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

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

Chemical name	Percent Range	Formula	Molecular weight	CAS No.	EC No (EU Index No)
Ammonium hydrogen sulfate	<1%	H_5NO_4S	115.11	7803-63-6	232-265-5

Section 4: FIRST AID MEASURES

Description of necessary first aid measures

General advice No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.

Inhalation Remove to fresh air.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

For emergency responders

Self-protection of the first aider No information available.

Most important symptoms/effects, acute and delayed

Symptoms No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Product itself does not burn.

Unsuitable Extinguishing Media No information available

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

Explosive properties
Not classified according to GHS criteria.

Hazardous combustion products No information available.

Specific/special fire-fighting measures

Specific/special fire-fighting measures No information available.

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

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 (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information.
See section 13 for more information.

Section 7: HANDLING AND STORAGE

Preventive measures for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Precautions for safe handling

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Exposure Limits

Chemical name	CAS No.	Percent Range	China	ACGIH TLV	OSHA PEL
Ammonium hydrogen sulfate	7803-63-6	<1%	-	No data available	-

Legend *See section 16 for terms and abbreviations*

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure adequate ventilation.

Hand Protection Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance aqueous solution **Color** colorless
Odor Odorless **Odor threshold** No data available

Property	Values	Remarks • Method
Molecular weight	No data available	
pH	~ 7	@ 20 °C

Melting point / freezing point	~ 0 °C / 32 °F
Initial boiling point and boiling range	~ 100 °C / 212 °F
Evaporation rate	1 (water = 1)
Vapor pressure	17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F
Relative vapor density	0.62
Specific gravity - VALUE 1	0.99
Partition coefficient	Not applicable
Soil Organic Carbon-Water Partition Coefficient	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity	~ 1 cP (mPa s) at 20 °C / 68 °F
Kinematic viscosity	~ 1.01 cSt (mm^2/s) at 20 °C / 68 °F

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Most Polar Organic Solvents	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate	No data available
Aluminum Corrosion Rate	No data available

Volatile Organic Compounds (VOC) Content

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Ammonium hydrogen sulfate	7803-63-6	No data available	-

Explosive properties

Upper explosion limit	No data available
Lower explosion limit	No data available

Flammable properties

Flash point	No data available

Flammability Limit in Air

Upper flammability limit:	No data available
Lower flammability limit:	No data available

Oxidizing properties No data available.

Bulk density

Section 10: STABILITY AND REACTIVITY

Reactivity
Not applicable.

Chemical stability
Stability Stable under normal conditions.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Possibility of hazardous reactions
Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization
None under normal processing.

Conditions to avoid
Conditions to avoid None known based on information supplied.

Incompatible materials
Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products
None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	No known effect based on information supplied.
Eye contact	No known effect based on information supplied.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Symptoms	No information available.

Acute toxicity
Based on available data, the classification criteria are not met

Mixture
No data available.

Ingredient Acute Toxicity Data
No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Ammonium hydrogen sulfate (<1%) CAS#: 7803-63-6	Rat LD_{50}	2140 mg/kg	None reported	None reported	ERMA

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

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 (dust/mist)
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 (gas)

Acute Toxicity Estimations (ATE)

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Skin Corrosion/Irritation Data
No data available.

Serious eye damage/eye irritation
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Eye Damage/Eye Irritation Data
No data available.

Respiratory or skin sensitization
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Sensitization Data
No data available.

STOT - single exposure
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data
No data available.

Carcinogenicity
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Carcinogenicity Data
No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Ammonium hydrogen sulfate	7803-63-6	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

Mutagenicity
Based on available data, the classification criteria are not met.

Mixture *invitro* **Data**
No data available.

Substance *invitro* **Data**
No data available.

Mixture *invivo* **Data**
No data available.

Substance *invivo* **Data**
No data available.

Reproductive toxicity
Based on available data, the classification criteria are not met.

Mixture
No data available.

Ingredient Reproductive Toxicity Data
No data available.

Aspiration hazard
Based on available data, the classification criteria are not met.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown Aquatic Toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Mixture

Aquatic Acute Toxicity
No data available.

Aquatic Chronic Toxicity
No data available.

Substance

Aquatic Acute Toxicity
No data available.

Aquatic Chronic Toxicity
No data available.

Persistence and degradability

Mixture
No data available.

Bioaccumulation
Material does not bioaccumulate.
Mixture
No data available.

Partition coefficient
Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient
Not applicable

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORTATION INFORMATION

DOT Not regulated

IMDG Not regulated

IATA Not regulated

Additional information
There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.
If the item is part of a reagent set or kit the classification would change to the following:
UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.
If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

National Regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazard factors: Not applicable.
Catalogue of occupational diseases: Not applicable.

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals Not applicable.

Chemical name	Inventory of hazardous chemicals
Ammonium hydrogen sulfate	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable.

List of hazardous chemicals under priority management Not applicable.

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used
Inventory of highly toxic goods Not applicable.

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals
List of toxic chemicals severely restricted for import and export in China Not applicable.

Measures for the Environmental Management of New Chemical Substances
IECSC Complies
IECSC - China Inventory of Existing Chemical Substances

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

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
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: OTHER INFORMATION

Prepared By Hach Product Compliance Department

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Revision Note
Reference Sources for Section 11 See Section 11: TOXICOLOGICAL INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)
CDC	CDC (Center for Disease Control)
CEPA	CEPA (Canadian Environmental Protection Agency)
CICAD	CICAD (Concise International Chemical Assessment Documents)
ECHA	ECHA (The European Chemicals Agency)
EEA	EEA (European Environment Agency)
EPA	EPA (Environmental Protection Agency)
ERMA	ERMA (New Zealands Environmental Risk Management Authority)
ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
INERIS	INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM	IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH IDLH	Immediately Dangerous to Life or Health
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

End of Safety Data Sheet