

## SAFETY DATA SHEET

### 1. Product and Company Identification

Product Name	Ammonium sulfate solution, 2M
Product Number	27503-60
Product Use	Reference Fill Solution for Ion Selective Electrode
Manufacturer	Van London Company
Address	10540 Rockley Road, Houston, Texas 77099
Telephone	832-456-6641
Emergency Phone	832-456-6641

### 2. Hazards Identification

#### Emergency Overview

##### OSHA Hazards

Not a hazardous substance or mixture.

#### HMIS Classification

Health Hazard:	1
Flammability:	0
Physical Hazards:	0

#### NFPA Rating

Health Hazard:	0
Fire:	0
Reactivity Hazard:	0

#### Potential Health Effects

Inhalation:	No effects anticipated
Skin:	No effects anticipated
Eyes:	No effects anticipated
Ingestion:	No effects anticipated

### 3. Composition/Information on Ingredients

Component	CAS Number	Weight %
Ammonium sulfate	7783-20-2	1.3
Deionized water	7732-18-5	98.7

### 4. First Aid Measures

Eye	Flush eyes with plenty of water as a precaution.
Skin	Wash off with soap and plenty of water.
Inhalation	Move person into fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.

### 5. Fire Fighting Measures

#### Suitable

**extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

<b>Hazardous combustion products</b>	Nitrogen oxides (NOx), Sulfur oxides.
<b>Special protective equipment for firefighters</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental Release Measures

### Personal precautions

Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

### Environmental precautions

No special environmental precautions needed.

### Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

## 7. Handling and Storage

<b>Handling</b>	Avoid contact with eyes. Avoid inhalation of vapour or mist. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed and upright in a dry and well-ventilated place. Store at ambient or lower temperature. Protect against physical damage.

## 8. Exposure Controls and Personal Protection

<b>Exposure Limits</b>	Contains no substances with occupational exposure limit values	
<b>Engineering Controls</b>	Maintain general industrial hygiene practices when using this product.	
<b>Personal Protective Equipment</b>	<b>Respiratory Protection</b>	Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
	<b>Hand Protection</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands after handling.
	<b>Eye Protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
	<b>Skin and body protection</b>	Impervious clothing.
	<b>Hygiene measures</b>	General industrial hygiene practice.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Clear, colorless liquid
<b>Odor</b>	None
<b>Odor Threshold</b>	No data available
<b>pH</b>	4.8 - 8
<b>Freezing Point</b>	-8°C
<b>Boiling Point</b>	100°C
<b>Flash Point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available

<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Solubility</b>	Soluble in water
<b>Vapor density</b>	No data available
<b>Relative density</b>	1.13 g/cm <sup>3</sup> at 20°C (68°F)
<b>Partition coefficient:</b>	
<b>n-octanol/water</b>	No data available
<b>Auto-Ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Density</b>	No data available
<b>Viscosity</b>	No data available
<b>Molecular mass</b>	264.28 g/mol

#### 10. Stability and Reactivity

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous reactions</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No data available

#### 11. Toxicological Information

<b>Signs and Symptoms of Overexposure</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
<b>Acute Effects</b>	<b>Eye Contact</b>	No data available
	<b>Skin Contact</b>	No data available
	<b>Inhalation</b>	No data available
	<b>Ingestion</b>	No data available
	<b>Germ Cell Mutagenicity</b>	No data available
<b>Target Organ Effects</b>		No data available
<b>Chronic Effects</b>		No data available
<b>Medical Conditions</b>		No data available
<b>Aggravated by Exposure</b>		
<b>Acute Toxicity Values</b>	<b>Oral LD50</b>	No data available
	<b>Inhalation LC50</b>	No data available
	<b>Dermal LD50</b>	No data available
<b>Carcinogenicity</b>	<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
	<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
	<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>Reproductive Toxicity</b>		No data available

<b>Teratogenicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration Hazard</b>	No data available
<b>Potential Inhalation</b>	No data available
<b>Health Ingestion</b>	No data available
<b>Effects Skin</b>	No data available
<b>Eyes</b>	No data available

## 12. Ecological Information

<b>Toxicity</b>	No data available
<b>Persistence &amp; degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	No data available

## 13. Disposal Considerations

<b>Disposal method</b>	Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Contaminated packaging</b>	Dispose of as unused product.

## 14. Transport Information

<b>DOT (US)</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

## 15. Regulatory Information

<b>OSHA Hazards</b>	No known OSHA hazards		
<b>SARA 302 Components</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
<b>SARA 313 Components</b>	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.		
<b>SARA 311/312 Hazards</b>	No SARA Hazards		
<b>Massachusetts Right To Know Components</b>	Ammonium sulfate	CAS-No. 7783-20-2	Revision Date: 1993-04-24
<b>Pennsylvania Right To Know Components</b>		CAS-No.	Revision Date
Water		7732-18-5	
Ammonium sulfate		7783-20-2	1993-04-24
<b>New Jersey Right To Know Components</b>		CAS-No.	Revision Date
Water		7732-18-5	
Ammonium sulfate		7783-20-2	1993-04-24
<b>California Prop. 65 Components</b>	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.		

## 16. Other Information

<b>Issuing Date</b>	4/20/2015
<b>Revision No.</b>	1.0

**Disclaimer**

The information contained herein is accurate to the best of our knowledge, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Van London pHOenix Company makes no warranty of any kind, expressed, or implied, concerning the safe use of this material in your process or in combination with other substances. Van London pHOenix Company shall not be held liable for any damage resulting from handling or from contact with the above product.