

**Material Safety Data Sheet**  
**J. R. Simplot Company**  
**AgriBusiness**

Trade Name: Mixed Liquid Fertilizer Solution  
Registration No: None

**M77612TX**

**SECTION 1**

**CHEMICAL PRODUCT AND COMPANY INFORMATION**

<b>Manufacturer or Formulator:</b>	J.R. Simplot Company P.O. Box 947 Hampstead, TX 77445	<b>Product Name:</b>	Mixed Liquid Fertilizer Solution
		<b>Common Name:</b>	Mixed Liquid Fertilizer Solution
		<b>Chemical Type:</b>	Inorganic Chemical Fertilizer Solution
<b>Emergency Phone - Chemtrec:</b>	1-800-424-9300		

**SECTION 2**

**COMPOSITION INFORMATION**

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous	TLV	PEL
Ammonium Nitrate	6484-52-2	NH <sub>4</sub> NO <sub>3</sub>		10 mg/m <sup>3</sup>	Not listed
			<b>Non Hazardous</b>		
This product is a blend of the following non-hazardous ingredients				Not Available	Not Available
Potassium Chloride	7447-40-7	KCl			
Ammonium Thiosulfate Solution	7783-18-8	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		<i>2 ppm SO<sub>2</sub> and 25 ppm NH<sub>3</sub></i>	
Urea	57-13-6	CO(NH <sub>2</sub> ) <sub>2</sub>			
Ammonium Polyphosphate	68333-79-9	(NH <sub>4</sub> ) <sub>3</sub> PO <sub>4</sub>		<i>Not applicable</i>	<i>Not available</i>
Water	7732-18-5	H <sub>2</sub> O			
Inert Ingredients					

**SECTION 3**

**HAZARDS IDENTIFICATION**

**Ingestion:** Minimal hazard under normal conditions and use. Ingestion of large quantities may cause systemic ammonia poisoning and nitrate poisoning, gastrointestinal discomfort, vomiting, weakness or other medically related problems.

**Inhalation:** Not considered a normal route of entry.

**Eye Contact:** Prolonged contact may cause aggravation of eyes.

**Skin Absorption:** Prolonged contact may cause abrasion to skin.

**Skin Contact:** Slight dermal abrasion, irritation and redness is possible with prolonged contact, especially around cuffs and collars.

**Effects of Overdose:** Ingestion of large amounts may cause dizziness, abdominal cramps, vomiting, and diarrhea, discomfort to skin and eyes. Persons with impaired kidney function may be more susceptible to the effects of the substance.

**SECTION 4**

**FIRST AID MEASURES**

**Ingestion:** If large amount is ingested, give several glasses of milk or water. Vomiting may occur spontaneously, but **DO NOT INDUCE!** Never give anything by mouth to an unconscious person.

**Inhalation:** Normally not a route of entry. If exposed to thermal decomposition gases, evacuate the person from area and, if necessary, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if condition persists

**Eyes:** Flush eyes with running water for at least 15 minutes. Seek medical attention if condition persists.

**Skin:** Wash with soap and water. Seek medical attention if condition persists.

**Notes to Physician:** Consult standard literature. Treatment based on the sound judgment of the physician and the individual reactions of the patient.

**SECTION 5**

**FIRE FIGHTING MEASURES**

**Extinguishing Media:** Non-flammable liquid. Use media suitable to extinguish source of fire.

**Special Fire Fighting Procedures:** None in liquid state. Use procedure for source of fire.

**Unusual Fire and Explosion Hazards:** None in liquid state.

**SECTION 6**

**ACCIDENTAL RELEASE MEASURES**

**Environmental Precautions:** Slightly toxic to aquatic life. Do not contaminate any watercourse or body of water by direct application, cleaning of equipment or disposal.

**Steps to be taken in case material is released or spilled:** Shut off source of leak or spill. Avoid contact with strong acids. Reclaim if possible. Absorb with sand or kitty litter. Keep public away and advise local agencies if substance has entered a water course or sewer. Could be used as a fertilizer using good agronomic practices.

**SECTION 7**

**HANDLING AND STORAGE**

**Precautions to be taken in handling and storing:** Prevent spillage and avoid contact with eyes and skin. Storage temperatures should be between 30°F (-1°C) and 100°F (38°C) to keep solution liquid and pumpable. Do not expose to fire. Store separate from acids, strong oxidizing agents. Store blends of aqua ammonia plus ammonium thiosulfate in lined, coated or stainless equipment. Keep out of the reach of children. **DO NOT ALLOW TO DRY.**

**SECTION 8**

**EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Ventilation Protection:** Adequate ventilation

**Respiratory Protection:** None required under normal conditions.

**Protective Clothing:** Chemical clothing necessary to avoid skin contact.

**Eye Protection:** Chemical splash-proof goggles.

**Other:** Eyewash fountain and/or safety shower in area for washing skin and eyes

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	Not available	<b>Solubility in Water:</b>	Complete
<b>Specific Gravity:</b>	Not available	<b>% Volatiles (by volume):</b>	Not applicable
<b>Flashpoint:</b>	Non-flammable	<b>Vapor Pressure, mm Hg:</b>	Not applicable
<b>pH:</b>	Not available	<b>Reaction with Water:</b>	None
<b>Appearance:</b>	Clear whitish liquid; essentially no odor	<b>Extinguishing Media:</b>	Use media suitable to extinguish source of fire.

**SECTION 10 STABILITY AND REACTIVITY**

**Stability (Normal Conditions):** Stable  
**Conditions to Avoid:** Unstable above 302°F (150°C). Avoid fire conditions. Do not mix with anhydrous ammonia, phosphoric acid, other strong acids or zinc sulfate. Avoid breathing decomposition products.  
**Incompatibility (Material to Avoid):** Bromine trifluoride, potassium permanganate plus sulfuric acid. Zinc-clad and copper bearing alloys  
**Hazardous Decomposition Products:** None  
**Hazardous Polymerization:** Will not occur

**SECTION 11 TOXICOLOGY**

	Oral LD50 (rat)	Dermal LD50 (rat)	Aquatic Fish 96	Aquatic (other)
Potassium Chloride (Muriate of Potash)	1,500-2,600 mg/kg	none listed	2,010 mg/L	none listed
Ammonium Nitrate	2217 mg/kg	> 5,000 mg/kg	95-102 mg/kg total NH3/L	124.9 mg total NH3/L (daphnia)
<b>Inhalation 4 hour LC50:</b> > 88,800 mg/m <sup>3</sup>				
Urea	14,300 mg/kg	none listed	> 9,100 mg/L	> 10,000 mg/L (daphnia)
Ammonium Thiosulfate	1,950-2,890 mg/kg	none listed	none listed	> than 48.6 mg total NH <sub>3</sub> /L
Ammonium Polyphosphate	> 2,000 mg/kg	> 5,000 mg/kg	>> 5,000 mg/kg	none listed

All toxicity data from TFI Product Testing Results.

**SECTION 12 ECOLOGICAL INFORMATION**

None Listed.

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Disposal of material should be in accordance with applicable local, state and federal environmental regulatory requirements. Could be used as a fertilizer using good agronomic practices

**SECTION 14 TRANSPORT INFORMATION**

<b>Shipping name:</b>	Not regulated by DOT	<b>C.A.S. Number:</b>	57-13-6
<b>Hazard Class:</b>	None	<b>D.O.T. Number:</b>	None
<b>Reportable Quantity (RQ):</b>	None	<b>Haz Waste No:</b>	None
<b>Labels Required:</b>	None	<b>EPA Regist No:</b>	None
<b>Placard:</b>	None		

**SECTION 15 REGULATORY INFORMATION**

**Carcinogenicity:** by IARC? Yes ( ) No (X) by NTP? Yes ( ) No (X)

This product contains ammonium nitrate solution which may be subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372, under the nitrate compound category.

**SECTION 16 OTHER INFORMATION**

<b>Flash Point (Test Method):</b>	Non-flammable	<b>Flammable Limits</b>	<b>LOWER</b>	<b>UPPER</b>
<b>Autoignition Temperature:</b>	Not applicable	(% BY VOLUME)	N/A	N/A
<b>Hazard Rating (N.F.P.A.):</b>	<b>Health: 1</b>	<b>Fire: 0</b>	<b>Reactivity: 0</b>	<b>Specific: Not applicable</b>

This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association (N.F.P.A.).

MSDS Version Number: 1

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