



A COOPERATIVE FOR GROWERS

Safety Data Sheet: AMMONIUM NITRATE SOLUTION (20-0-0 AN)

Last Revision 01/19/2023

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**SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION**

<b>MANUFACTURER OR FORMULATOR:</b> J.R. Simplot Company P.O. Box 70013 Boise, ID 83707	<b>PRODUCT NAME:</b> Ammonium Nitrate Solution (20-0-0 AN) <b>COMMON NAME:</b> Ammonium Nitrate 57% Aqueous Solution <b>CHEMICAL TYPE:</b> Salt solution
<b>EMERGENCY PHONE – CHEMTREC: 1-800-424-9300</b>	

**SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL	C.A.S. No.	CHEMICAL FORMULA	WT% Hazardous Non-hazardous	TLV	PEL
Ammonium Nitrate	6484-52-2	NH <sub>4</sub> NO <sub>3</sub>	57.1%	N.E.	Not available
Water	7732-18-5	H <sub>2</sub> O	42.9%	Not listed	Not available

**SECTION 3: HAZARDS IDENTIFICATION**

**INGESTION:** No hazard in normal industrial use. Ingestion of large amount may cause systemic ammonia poisoning and nitrate poisoning.  
**INHALATION:** No hazard under normal conditions.  
**EYE CONTACT:** May be aggravating to eyes.  
**SKIN ABSORPTION:** Not absorbed through skin.  
**SKIN CONTACT:** May be aggravating to skin.  
**EFFECTS OF OVERDOSE:** Ingestion of large amounts may cause dizziness, abdominal cramps, vomiting and diarrhea, discomfort to skin and eyes.

**SECTION 4: FIRST AID MEASURES**

**INGESTION:** For ingestion of large amounts, give 2-3 glasses of water and induce vomiting. Seek medical attention if condition persists.  
**INHALATION:** If exposed to thermal decomposition gases, evacuate the person from area and if necessary, give artificial resuscitation. Keep person at rest and call a physician.  
**EYES:** Flush eyes with fresh running water for 15 minutes. If condition persists, call a physician.  
**SKIN:** Wash skin with soap and water. Seek medical attention if condition persists.

**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.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None in liquid state. Organic and oxidizable materials can sensitize dry Ammonium Nitrate to a readily explodable state; can detonate if heated under confinement with high pressure.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**ENVIRONMENT PRECAUTIONS:** Low toxicity for fish. Do not contaminate any waterway or any body of water by direct application, cleaning of equipment, or disposal.  
**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Dike area and maximize recovery. Pump into tank or absorb in diatomaceous earth. Sweep up and place into containers for recycle or disposal. Wash area with water. Prevent entry into sewer or watercourses.

**SECTION 7: HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Temperature should be between 50°F to 140°F to keep solution liquid and pumpable. Do not expose to fire. Store in a well ventilated area. DO NOT ALLOW TO DRY.

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

**VENTILATION PROTECTION:** Adequate ventilation.  
**RESPIRATORY PROTECTION:** None required under normal conditions.  
**PROTECTIVE CLOTHING:** Normal work clothing and impervious gloves.  
**EYE PROTECTION:** Safety glasses with side shields or chemical splash-proof goggles.  
**OTHER:** Eyewash fountain and safety shower in area.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**BOILING POINT:** Salt decomposes @ 350°F  
**SPECIFIC GRAVITY:** 1.270 @ 60°F  
**FLASHPOINT:** Non-flammable  
**pH:** 10% solution: 4.5-5.0  
**APPEARANCE:** Clear solution.  
**EXTINGUISHING MEDIA:** Water or media suitable to extinguish source of fire.

**SOLUBILITY IN WATER:** Complete  
**% VOLATILES (BY VOLUME):** Not applicable  
**VAPOR PRESSURE, mm Hg:** Not applicable  
**REACTION WITH WATER:** None

**SECTION 10: STABILITY AND REACTIVITY**

**STABILITY (NORMAL CONDITIONS):** Stable  
**CONDITIONS TO AVOID:** High temperatures and fire conditions.  
**INCOMPATIBILITY (MATERIAL TO AVOID):** Organic and easily oxidizable matter.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Under extreme fire conditions, may liberate hazardous gases of oxides of nitrogen and ammonia.  
**HAZARDOUS POLYMERIZATION:** Will not occur

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE DERMAL TOXICITY:** LD<sub>50</sub> (rat) is greater than 5,000 mg/kg (ppm); not acutely toxic by dermal exposure. (TFI Product Testing Results, OECD Guideline 402)  
**ACUTE ORAL TOXICITY:** LD<sub>50</sub> (rat) is 1,480-1,770 mg/kg; not acutely toxic by oral exposure. (TFI Product Testing Results, OECD Guideline 425)  
**ACUTE INHALATION TOXICITY:** 4-hour LC<sub>50</sub> (rat) is greater than 88,8000 mg/m<sup>3</sup>, not toxic by inhalation. (TFI Product Testing Results)  
**ACUTE AQUATIC TOXICITY:** Fish 48-hour LC<sub>50</sub> is 95-102 mg total NH<sub>3</sub>/L; daphnia 24-hour EC<sub>50</sub>: 124.9 mg total NH<sub>3</sub>/L. Slightly toxic to aquatic organisms. (TFI Product Testing Results)

**SECTION 12: ECOLOGICAL INFORMATION**

**NONE LISTED.**

**SECTION 13: DISPOSAL CONSIDERATIONS**

**WAST DISPOSAL PROCEDURES:** Pump into tank or absorb in diatomaceous earth product, sweep up and place into container for use or disposal. Follow local, state and federal regulations for disposal. Could be used as a fertilizer using good agronomic practices.

**SECTION 14: TRANSPORT INFORMATION**

**SHIPPING NAME:** Not regulated by D.O.T.  
**HAZARD CLASS:** None  
**REPORTABLE QUANTITY (RQ):** None  
**LABELS REQUIRED:** None  
**PLACARD:** None

**C.A.S. NUMBER:** See "Ingredients"  
**D.O.T. NUMBER:** None  
**HAZ WASTE NO:** None  
**EPA REGIST NO:** None

**SECTION 15: REGULATORY INFORMATION****CARCINOGENICITY:** By IARC: No By NTP: No

This product contains ammonium nitrate solution which is 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.

**SECTION 16: OTHER INFORMATION**

**FLASH POINT (TEST METHOD):** No –flammable  
**AUTOIGNITION TEMPERATURE:** Not applicable

**FLAMMABLE LIMITS**  
 (% BY VOLUME)

**LOWER**  
 N/A

**UPPER**  
 N/A

**N.F.P.A. (National Fire Protection Association) Hazard Rating:**

**Health: 1 Flammability: 0 Reactivity: 0 Specific: None**

Note: If allowed to salt out, material may exhibit oxidizer characteristics.

**REASON FOR REVISION:** Annual revision

**SDS PREPARED BY:** CALAMCO

This information is taken from sources or based upon data believed to be reliable, however, CALAMCO makes no warranty as to the absolute correctness or sufficiency or any of the foregoing or that additional or other measures may not be required under particular conditions.