**Section 1 – Identification**

**Product**
30% N Ammonium Nitrate Solution  
(85.7% A.N. Solution)  
**Manufacturer**
TradeMark Nitrogen Corp.
**Address**
1216 Old Hopewell Road, Tampa, FL 33619
**Phone**
(813) 626-1181 (800) 452-3107  
**24 Hour Emergency Contact**
Chemtrec (800) 424-9300

**Recommended Use:**
Used as a nitrogen fertilizer and in other manufacturing processes.

**Section 2 – Hazard Identification**

**Warning:** May intensify fire; oxidizer
Store away from organics or other oxidizable materials
In case of fire: Use water to put out fire.

**Section 3 – Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Component</th>
<th>CAS. No.</th>
<th>Percent by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ammonium Nitrate (NH₄NO₃)</td>
<td>6484-52-2</td>
<td>85.7%</td>
</tr>
<tr>
<td></td>
<td>Water (H₂O)</td>
<td>7732-18-5</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

**Section 4 – First Aid Measures**

**Inhalation**
If inhaled: Remove person to fresh air and keep comfortable for breathing. Provide artificial respiration if necessary. Seek medical attention if necessary.

**Skin Contact**
If on skin (or hair): Take off all contaminated clothing. Rinse skin with soap and water for at least 15 minutes. Liquid is hot - may need to treat exposed person for burns.

**Eye Contact**
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

**Ingestion**
If swallowed: **Do NOT induce vomiting.** Drink large amounts of water. Never give anything by mouth to an unconscious person. Seek medical attention.

**Acute Health Hazards**
High levels of nitrates may reduce the blood’s ability to transport oxygen causing headache, fatigue, dizziness and blue lips and skin (methemoglobinemia).

**Chronic Health Hazards**
Methemoglobinemia is the primary health effect, but possible excessive action of the kidneys and perhaps bowels can occur.

**Section 5 – Fire Fighting Measures**

**Suitable Extinguishing Techniques & Equipment**
30% N ammonium nitrate is non-flammable aqueous solution. Flooding quantity of water is recommended in the event of a fire. Do not use salt water, carbon dioxide, dry chemicals or foam extinguishers.

**Chemical hazards From Fire**
If product evaporates, residual solid can be explosive. In a fire, carbon oxides, nitrogen oxides and ammonia may be present.

**Special Fire Fighting Procedures**
Keep material wet to prevent nitrate salts from forming as they can support combustion or become unstable. Avoid contamination of ammonium nitrate with organic materials such as oil, sulfur, metal fines or other combustible substances as the mixture may become unstable. For large fires, apply water to the sides of the container from a distance. If that is not possible, evacuate area. If the liquid evaporates, the remaining solid may become explosive.

**NFPA Rating**
Health - 1 (Slight), Fire - 0 (Least), Reactivity - 3 (High) OX - Oxidizer

**Section 6 – Accidental Release Measure**

**Personal Precautions**
Avoid splashing. Prevent exposure to spilled material with the use of proper PPE.

**Protective Equipment**
PPE should include gloves, goggles, face shield and level C protective suit.
### Section 6 – Accidental Release Measure Continued

**Containment**
Control the flow of product using dikes of soil, sand bags or other commercially available inert sorbent socks or booms.

**In Case of Spill**
Absorb product with inert absorbent. Avoid splashing or spraying. Contain and pick up spill in diked area. Prevent discharge to sewers or water ways. If uncontaminated, recover and re-use.

### Section 7 – Safe Handling and Storage

**Precautions for Safe Handling and Storage**
Store in a well ventilated cool dry place. Avoid heating Ammonium Nitrate Solution in a confined space (i.e. pipe, pump, etc.) as the solution may decompose and explode. Before performing any hot work, clean and flush the line.

**Incompatibility**
Avoid contact with readily oxidizable materials, strong acids and chlorates. Contact with alkaline materials will produce ammonia. Will corrode copper, bronze and brass.

### Section 8 – Exposure Controls / Personal Protection

**Exposure Limits**

<table>
<thead>
<tr>
<th>Component</th>
<th>Permissible Exposure Limit</th>
<th>Threshold Limit Value</th>
<th>Short Term Exposure Limit</th>
<th>Immediately Dangerous to Life or Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Nitrate ( \text{NH}_4\text{NO}_3 )</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Water ( \text{H}_2\text{O} )</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

**Engineering Controls**
Local or general exhaust. Eyewash facilities should be available.

**Personal Protective Equipment**

- **Eyes** - Chemical safety goggles or safety glasses.
- **Hands** - Impervious gloves.
- **Respiratory** - None required under normal conditions. NIOSH approved respirator if there is a mist of the product.

### Section 9 – Physical and Chemical Properties

**Appearance and Odor**
Clear liquid with little to no detectable odor.

**Boiling Point**
> 212°F at 1 atmosphere

**Freezing Point**
N/A

**Vapor Pressure**
0.06 psia at 60°F

**Gallons per Ton**
172.41

**Weight per Gallon**
11.60 lbs/gal @ 60°F
1.39 kg/L @ 15.5°C

**Flash Point**
Not Flammable

**Auto Ignition Temp**
Not Flammable

**Specific Gravity**
1.380 at 60°F (15.5°C)

**Molecular Weight**
N/A

**Solubility in Water**
Miscible in Water

**Evaporative Rate**
N/A

**pH**
6.3 - 7.8

**Salt-Out Temp**
176°F (80.0°C)

**Flammability Limits**
N/A

**LEL**
N/A

**UEL**
N/A

### Section 10 – Stability and Reactivity

**Reactivity**
Product is not reactive under normal conditions.

**Stability**
Product is stable under normal conditions.

**Hazardous Polymerization**
Hazardous polymerization will not occur.

**Conditions to Avoid**
Do not allow product to evaporate to dryness. Elevated temperatures may cause container to rupture.

**Incompatible Materials**
Avoid contact with readily oxidizable materials, strong acids and chlorates. Contact with alkaline materials will produce ammonia. Will corrode copper, bronze and brass.

**Hazardous Decomposition Products**
If product evaporates, residual solid (ammonium nitrate) can be explosive. In a fire, carbon oxides, nitrogen oxides and ammonia may be present.

### Section 11 – Toxicology Information

**Routes of Exposure**
Inhalation, ingestion or skin/eye absorption
Section 11 – Toxicology Information Continued

Symptoms and Signs of Exposure
- Eyes & Skin: mild irritant.
- Inhalation: of mist may irritate respiratory tract causing cough and sore throat.
- Ingestion: can cause abdominal pain, vomiting, diarrhea and methemoglobinemia.

Long Term Effects
Methemoglobinemia is the primary health effect.

Toxicity
- Ammonium Nitrate
- Rat Oral Toxicity: LD<sub>50</sub>: 2217-4500 mg/kg

Carcinogen
The International Agency for Research on Cancer has not classified ammonium nitrate for its carcinogenic potential (IARC 1987).

Section 12 – Ecological Information

Water
Low concentrations are not toxic to fish or other aquatic organisms. High concentrations may be toxic to aquatic life and encourage excessive algae growth.

Section 13 – Disposal Considerations

Waste
Ammonium Nitrate is not considered a hazardous waste. Disposal must be done in accordance with local, state and federal environmental regulations. Place waste in an appropriate container with correct labeling.

Section 14 – Transport Information

This material is hazardous as defined by 49 CFR 172.101 by the US Department of Transportation

- UN ID Number: UN 2426
- Proper Shipping Name: Ammonium Nitrate, Liquid, (Hot Concentrated Solution)
- Hazard Class: 5.1 (Oxidizer), HOT
- Packing Group: N/A
- US DOT Label: 5.1 (Oxidizer), HOT
- Authorized Packaging:
  - Trucks: Stainless steel MC 307, 312, DOT 407, 412
  - Rail: Stainless steel DOT 103, 104, 105, 109, 111, 112, 114, 115, 120
- Marine Pollutant: Dangerous to aquatic life in high concentrations.
- Emergency Response Guide Number: 140

Section 15 – Regulatory Information

United States - SARA Hazard Category
This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered, under applicable definitions, to meet the following categories:

- Fire - No
- Pressure - No
- Reactive - No
- Acute - Yes
- Chronic - No

SARA Title III Information
This product contains the following substances subject to the reporting requirements of Title III (EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS No.</th>
<th>CERCLA RQ (pounds)</th>
<th>SARA Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Nitrate</td>
<td>6484-52-2</td>
<td>N/A</td>
<td>302 304 313</td>
</tr>
</tbody>
</table>

(1) As nitrate compounds (water dissociable)

CERCLA / Superfund, 40 CFR Part 117, 302
If this product contains components subject to substances designated as CERCLA reportable Quantity (RQ) Substances, it will be designated in the above table with the RQ value in pounds. If there is a release of RQ Substance to the environment, notification to the National Response Center, Washington DC (800-424-8802) is required.

TSCA
Ammonium nitrate salt (Nitric Acid Ammonium Salt (1:1)) is listed on the the TSCA inventory.
Date of Revision


Disclaimer

The information contained in this SDS refers only to the specific material designated and does not relate to any process or use with any other materials. This information is furnished free of charge and is based on data believed to be accurate and reliable as of the date hereof. It is intended for use by persons possessing technical knowledge at their own discretion and risk. Since actual use is beyond our control, no warranty, expressed or implied, and no liability is assumed by TradeMark Nitrogen Corp. in conjunction with the use of this information. Nothing herein is to be construed as a recommendation to infringe any patents. TradeMark Nitrogen Corp. assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.