SAFETY DATA SHEET
N-P-K Liquid Fertilizer Blend with ≥ 25% UAN

Section 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>N-P-K Liquid Fertilizer Blend with ≥ 25% UAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Product code: 30857</td>
</tr>
<tr>
<td>Synonym: Urea Ammonium Nitrate Polyphosphate Liquid Fertilizer Blends with ≥ 25% Urea Ammonium Nitrate</td>
<td></td>
</tr>
<tr>
<td>Product type</td>
<td>Liquid.</td>
</tr>
</tbody>
</table>

Identified uses of the substance or mixture and uses advised against

<table>
<thead>
<tr>
<th>Identified uses</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizer. Professional use in formulation of preparations and end-use. Industrial use for the formulation of preparations, intermediate use, and end use in industrial settings.</td>
<td>Risk assessment.</td>
</tr>
</tbody>
</table>

Supplier's details

<table>
<thead>
<tr>
<th>Supplier's details</th>
<th>Agrium Canada Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13131 Lake Fraser Drive, S.E.</td>
</tr>
<tr>
<td></td>
<td>Calgary, Alberta, Canada, T2J 7E8</td>
</tr>
<tr>
<td></td>
<td>Agrium U.S. Inc.</td>
</tr>
<tr>
<td></td>
<td>5296 Harvest Lake Drive</td>
</tr>
<tr>
<td></td>
<td>Loveland, CO 80538</td>
</tr>
<tr>
<td></td>
<td>Company phone number (North America):</td>
</tr>
<tr>
<td></td>
<td>1-800-403-2861 (Customer Service)</td>
</tr>
</tbody>
</table>

Emergency telephone number (with hours of operation)

<table>
<thead>
<tr>
<th>Emergency telephone number (with hours of operation)</th>
<th>Agrium 24 Hr Emergency Telephone Numbers:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English:</td>
</tr>
<tr>
<td></td>
<td>Transportation Emergencies: 1-800-792-8311</td>
</tr>
<tr>
<td></td>
<td>Medical Emergencies: 1-303-389-1653</td>
</tr>
<tr>
<td></td>
<td>French or Spanish:</td>
</tr>
<tr>
<td></td>
<td>Transportation or Medical Emergencies: 1-303-389-1654</td>
</tr>
</tbody>
</table>

Section 2. Hazard identification

Classification of the substance or mixture

| Classification of the substance or mixture | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B |

OSHA/HCS status

| OSHA/HCS status | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |

GHS label elements

| Hazard pictograms | Not Applicable. |
|                  | No Applicable.  |
|                  | Non applicable. |

Signal word

| Signal word | Warning |

Hazard statements

| Hazard statements | Causes eye irritation. |

Precautionary statements

| Precautionary statements | General: Not applicable. |
|                          | Prevention: Wear eye protection. Wash hands thoroughly after handling. |
|                          | Response: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |

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Date of previous issue: 6/1/2017

Version: 2.2
**Section 2. Hazard identification**

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** : None known.

**Other hazards which do not result in classification** : None known.

**Section 3. Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient name</strong></td>
<td><strong>% (w/w)</strong></td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>41 - 57</td>
</tr>
<tr>
<td>Urea</td>
<td>7 - 20</td>
</tr>
<tr>
<td>Polyphosphoric acids, ammonium salts</td>
<td>5 - 30</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>4 - 12</td>
</tr>
<tr>
<td>Water</td>
<td>Balance</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Occupational exposure limits, if available, are listed in Section 8.**

**Section 4. First-aid measures**

**Description of necessary first aid measures**

**Eye contact** : Begin eye irrigation immediately. Eye exposures to nitrates may require medical evaluation following decontamination if pain or irritation persists. Immediately rinse eyes with large quantities of water or saline for a minimum of 15 minutes. If possible, remove contact lenses being careful not to cause additional eye damage. If the initial water supply is insufficient, keep the affected area wet with a moist cloth and transfer the person to the nearest place where rinsing can be continued for the recommended length of time. For additional advice call the medical emergency number on this SDS or your poison center or doctor.

**Inhalation** : Remove person to fresh air. No known significant effects. Seek medical attention for any signs of wheezing and/or breathing difficulties. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.

**Skin contact** : No known significant effects. Rinse the affected areas with water. Remove contaminated clothing, jewelry, and shoes. Wash/clean items before reuse. Seek medical attention for persistent skin pain or irritation. For additional advice call the medical emergency number on this SDS or your poison center or doctor.

**Ingestion** : Ammonium nitrate based product. May be irritating to mouth, throat and stomach. May cause methemoglobinemia (a condition that interferes with the oxygen-carrying capacity of the blood) if ingested in large quantities or over a prolonged period of time. Oral exposures: if the affected person requires CPR, avoid mouth to mouth contact. Do not induce vomiting. If vomiting occurs, attempt to keep head lower than chest so that vomit does not enter the lungs. Wash (decontaminate) face and mouth with water to remove visible material. If the exposed person is conscious and can swallow, give 1-2 sips of water. Do not give anything else by mouth. Loosen tight clothing such as collar, tie, belt or waistband to prevent any breathing restrictions. Call for emergency transportation to a hospital if the exposed person feels sick or has breathing difficulties, or a large amount is suspected ingested. For additional advice, call the medical emergency number on this SDS or your poison center or doctor.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact** : Causes eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.
Section 4. First-aid measures

**Ingestion**: May be irritating to the digestive tract. May cause nausea, vomiting, diarrhea, and abdominal pain. May cause methemoglobinemia (a condition that interferes with the oxygen-carrying capacity of the blood) if ingested in large quantities or over a prolonged period of time. Persons with methemoglobinemia may have blue tinge color to lips, nails, and skin. Also they may have shortness of breath or trouble breathing. Persons more susceptible to methemoglobinemia include: very young (less than 3 months), the elderly, those with chronic obstructive pulmonary disease (COPD), anemia, coronary artery disease, recent surgery or infection, and those with a genetic deficiency of G-6-PD.

**Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following:
- irritation
- watering
- redness

**Inhalation**:
- No specific data.

**Skin contact**:
- No specific data.

**Ingestion**: Over-exposure by ingestion is unlikely under normal working conditions. Adverse symptoms may include the following:
- nausea or vomiting
- stomach pains
- diarrhea

Methemoglobinemia (see Acute Health Effects)

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

**Notes to physician**: In case of inhalation of decomposition products (carbon monoxide, carbon dioxide, nitrogen oxides) in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for up to 72 hours. In cases of suspected methemoglobinemia, monitor methemoglobin blood levels. Treatment is supportive; methylene blue may be indicated based on patient severity. 24 Hr Medical Emergency telephone number for professional support: English: 1-303-389-1653; French or Spanish: 1-303-389-1654.

**Specific treatments**: Call the medical emergency number on this SDS or your poison center or doctor immediately if large quantities have been ingested. In cases of suspected methemoglobinemia, methylene blue may be indicated based on patient severity.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. Mouth-to-mouth resuscitation of oral exposure patients is not recommended. First-aiders with contaminated clothing should be properly decontaminated.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**: Non-flammable. Material will not burn. Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**: None known.

**Specific hazards arising from the chemical**:

In a fire or if heated, a pressure increase will occur and the container may burst. If evaporated to dryness, the product acts as an oxidizing agent, and supports combustion by liberating oxygen even if smothered. Cool containing vessels with flooding quantities of water until well after fire is out. A self contained breathing apparatus should be used to avoid inhalation of toxic fumes. When heated to decomposition it emits toxic fumes (NH3, N0, N02...). Contaminated water can cause environmental damage. Contain and collect water used to fight fire.
Section 5. Fire-fighting measures

Hazardous thermal decomposition products : Decomposes on heating. Decomposition products may include the following materials:
- carbon dioxide
- Carbon monoxide
- nitrogen oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Dangerous if allowed to dry out. Residue may exhibit oxidizing properties. May cause or intensify fire; oxidizer. Fight fire from protected location or maximum possible distance.

Section 6. Accidental release measures

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused adverse impacts (sewers, waterways, soil or air).

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. While this product, as produced, is not classified as an oxidizer, it is important to prevent conditions during handling and storage which may result in concentration of the product which may encourage it to behave as an oxidizer. Ensure that pumps are thermally protected against exceeding a temperature of 66 deg. C (150 deg. F). Also ensure that piping sytems, if insulated, are not externally heated (heat traced). Refer to NFPA 400 Hazardous Materials Code for further information on the safe storage and handling of hazardous materials.

Section 8. Exposure controls/personal protection

Control parameters

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Regulations:</td>
<td>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</td>
</tr>
<tr>
<td>U.S. Federal Regulations:</td>
<td>None assigned.</td>
</tr>
</tbody>
</table>

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose. For U.S. work sites where respiratory protection is required, ensure that a respiratory protection program meeting 29 CFR 1910.134 requirements is in place. No personal respiratory protective equipment is normally required.
### Section 9. Physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid. [Clear to slightly hazy liquid.]</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Light green</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Ammoniacal. [Slight]</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>6 to 8</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>Variable, depending on the formulation. 12 to -8°C (54 to 17°F)</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>[Product does not sustain combustion.]</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Non-combustible. Decomposes on heating. Evolves toxic fumes when heated to decomposition. Contains an oxidizing substance. Not an oxidizer at the manufactured concentration. It may become an oxidizing liquid if concentrated by evaporation.</td>
</tr>
<tr>
<td><strong>Lower and upper explosive (flammable) limits</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Variable.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>&gt;93°C (&gt;199.4°F)</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and reactivity

**Reactivity**

Slightly reactive or incompatible with the following materials:
- Reducing agents, acids, alkalis, organic materials.
- Incompatible with chlorinated solvents.
- Will corrode a wide variety of metals. Contact your sales representative or a metallurgical specialist to ensure compatibility with your equipment.

**Chemical stability**

The product is stable.

**Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**

Keep away from incompatible materials.

**Incompatible materials**

See above - Reactivity

**Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.
## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium chloride</td>
<td>LD50 Dermal</td>
<td>Rat - Male, Female</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>LD50 Oral</td>
<td>Rat - Male, Female, Female</td>
<td>2950 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Very low toxicity to humans or animals.

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>Skin Edema of conjunctivae</td>
<td>Rabbit</td>
<td>0</td>
<td>-</td>
<td>72 hours 3 days</td>
</tr>
<tr>
<td>Polyphosphoric acids, ammonium salts</td>
<td>Skin</td>
<td>Rabbit</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Non-irritating to the skin. Causes eye irritation.

#### Sensitization

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>Skin</td>
<td>Mouse</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Non-sensitizer. Not available.

#### Mutagenicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Experiment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>OECD 471 Bacterial Reverse Mutation Test</td>
<td>Experiment: In vitro Subject: Bacteria</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>OECD 476 In vitro Mammalian Cell Mutation Test</td>
<td>Experiment: In vitro Subject: Mammalian-Animal</td>
<td>Negative</td>
</tr>
<tr>
<td>Polyphosphoric acids, ammonium salts</td>
<td>-</td>
<td>Subject: Bacteria</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: No mutagenic effect.

#### Carcinogenicity

Not available.

**Conclusion/Summary**: Potential for nitrosamine formation if ingested. Do not ingest.

#### Reproductive toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Maternal toxicity</th>
<th>Fertility</th>
<th>Development toxin</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>Negative</td>
<td>Negative</td>
<td>Negative</td>
<td>Rat - Male, Female</td>
<td>Oral: 1500 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: No known significant effects or critical hazards.

#### Teratogenicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>Negative - Oral</td>
<td>Rat - Female</td>
<td>1500 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: No known significant effects or critical hazards.

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**Date of issue/Date of revision**: 7/1/2017  
**Date of previous issue**: 6/1/2017  
**Version**: 2.2  
7/13
Section 11. Toxicological information

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : May be irritating to the digestive tract. May cause nausea, vomiting, diarrhea, and abdominal pain. May cause methemoglobinemia (a condition that interferes with the oxygen-carrying capacity of the blood) if ingested in large quantities or over a prolonged period of time. Persons with methemoglobinemia may have blue tinge color to lips, nails, and skin. Also they may have shortness of breath or trouble breathing. Persons more susceptible to methemoglobinemia include: very young (less than 3 months), the elderly, those with chronic obstructive pulmonary disease (COPD), anemia, coronary artery disease, recent surgery or infection, and those with a genetic deficiency of G-6-PD.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
- irritation
- watering
- redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Over-exposure by ingestion is unlikely under normal working conditions. Adverse symptoms may include the following:
- nausea or vomiting
- stomach pains
- diarrhea
- Methemoglobinemia (see Acute Health Effects)

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : See above

Potential delayed effects : See above

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : Potential for nitrosamine formation if ingested. Do not ingest.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.
Section 11. Toxicological information

Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result                                                                 | Species                                                               | Exposure |
|-------------------------|------------------------------------------------------------------------|                                                                      |          |
| Polyphosphoric acids,   | Acute EC50 813000 µg/l Fresh water                                     | Daphnia - Daphnia magna - Neonate                                    | 48 hours |
| ammonium salts          | Acute LC50 >500 mg/l Fresh water                                       | Fish                                                                 | 96 hours |
|                         | Acute LC50 70000 µg/l Fresh water                                      | Fish - Oncorhynchus tshawytscha - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| Ammonium nitrate        | NOEC >1700 mg/l Marine water                                          | Algae                                                                | 10 days  |
|                         | Chronic NOEC 6 to 12 mg/l Fresh water                                  | Crustaceans - Cladocera                                             | 21 days  |
|                         | Acute EC50 490 mg/l Fresh water                                       | Daphnia - Daphnia magna                                             | 48 hours |
|                         | Acute LC50 447 mg/l Fresh water                                       | Fish                                                                 | 48 hours |

Conclusion/Summary: Very low acute toxicity to fish.

Persistence and degradability

Conclusions/Summary: According to EC criteria: Readily biodegradable

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Polyphosphoric acids,</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>ammonium salts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (KOC): 0.037 - 0.064

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>TDG Classification</th>
<th>DOT Classification</th>
<th>Mexico Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Section 14. Transport information

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Additional information</td>
<td>Classification per the current revision, Transportation of Dangerous Goods Regulation, Part 2, Sec 2.3.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Special precautions for user: **Transport within user’s premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not available.

## Section 15. Regulatory information

### Canadian lists
- **Canadian NPRI**: The following components are listed: Total of ammonia (NH₃ — CAS RN 7664-41-7) and the ammonium ion (NH₄⁺ — CAS RN 14798-03-9) in solution, expressed as ammonia.
- **CEPA Toxic substances**: None of the components are listed.
- **Canada inventory**: All components are listed or exempted.

### International regulations
- **Chemical Weapon Convention List Schedules I, II & III Chemicals**: Not listed.
- **Stockholm Convention on Persistent Organic Pollutants**: Not listed.
- **UNECE Aarhus Protocol on POPs and Heavy Metals**: Not listed.

### Inventory list
- **Australia**: All components are listed or exempted.
- **China**: All components are listed or exempted.
- **Europe**: All components are listed or exempted.
- **Japan**: Not determined.
- **Malaysia**: Not determined.
- **New Zealand**: All components are listed or exempted.
- **Philippines**: All components are listed or exempted.
Section 15. Regulatory information

Republic of Korea : All components are listed or exempted.
Taiwan : Not determined.
Turkey : Not determined.

U.S. Federal Regulations:
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
TSCA 8(b) inventory: All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs):
Not listed

Clean Air Act Section 602 Class I Substances:
Not listed

Clean Air Act Section 602 Class II Substances:
Not listed

DEA List I Chemicals (Precursor Chemicals):
Not listed

DEA List II Chemicals (Essential Chemicals):
Not listed

SARA 302/304 Composition/information on ingredients
SARA 304 RQ: Not applicable.
SARA 311/312 Classification:
Immediate (acute) health hazard

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
</table>

SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements Ammonium nitrate</td>
<td>6484-52-2</td>
<td>10.3 - 26.8</td>
</tr>
<tr>
<td>Supplier notification Ammonium nitrate</td>
<td>6484-52-2</td>
<td>10.3 - 26.8</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Ammonium nitrate
New York : None of the components are listed.
New Jersey : The following components are listed: Ammonium nitrate; Nitric acid, ammonium salt
Pennsylvania : The following components are listed: Nitric acid, ammonium salt
California Prop. 65 : Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 7/1/2017
Date of previous issue : 6/1/2017
Version : 2.2
Section 16. Other information

 Indicates information that has changed from previously issued version.
 This Safety Data Sheet has been revised to comply with Hazcom 2012 and WHMIS 2015 requirements.

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations
HPR = Hazardous Products Regulations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
<td>Weight of evidence</td>
</tr>
</tbody>
</table>

References

Hazardous Products Act and Regulations, current revision at time of (M)SDS preparation, Health Canada;
Domestic Substances List, current revision at time of (M)SDS preparation, Environment Canada;
29 CFR Part 1910, current revision at time of SDS preparation, U.S. Occupational Safety and Health Administration;
40 CFR Parts 1-799, current revision at time of SDS preparation, U.S. Environmental Protection Agency;
49 CFR Parts 1-199, current revision at time of SDS preparation, U.S. Department of Transport;
Threshold Limit Values for Chemical Substances, current edition at time of SDS preparation, American Conference of Governmental Industrial Hygienists;
NFPA 400, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;
NFPA 704, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;
Corrosion Data Survey, Sixth Edition, 1985, National Association of Corrosion Engineers;
ERG 2016, Emergency Response Guidebook, U.S. Department of Transport, Transport Canada, and the Secretariat of Transportation and Communications of Mexico
Hazardous Substances Data Bank, current revision at time of SDS preparation, National Library of Medicine, Bethesda, Maryland
Pocket Guide to Chemical Hazards, current revision at time of SDS preparation, National Institute for Occupational Safety and Health, Cincinnati, Ohio;
Agency for Toxic Substances and Disease Registry Databank, current revision at time of SDS preparation, U.S. Department of Health and Human Services, Atlanta, Georgia
National Toxicology Program, Report on Carcinogens, Division of the National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina.
Registry of Toxic Effects of Chemical Substances. National Institute for Occupational Safety and Health, Cincinnati, Ohio
The Fertilizer Institute, Product Toxicology Testing Program Results, TFI, Washington, D.C., 2003

Notice to reader
Section 16. Other information

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