

### Section 1. Identification

**Product identifier** : UAN 32-0-0

**Other means of identification** : Product code: 508-12617  
Historic MSDS #: 16007  
Synonym: Urea Ammonium Nitrate Solution 32-0-0; UAN Solution 32-0-0; UAN Liquid Fertilizer Blend 32-0-0; UAN 32

**Product type** : Liquid.

#### Relevant identified uses of the substance or mixture and uses advised against

| Identified uses      |                  |
|----------------------|------------------|
| Fertilizer solution  |                  |
| Uses advised against | Reason           |
| None.                | Risk assessment. |

**Supplier's details** : Agrium Canada Partnership (A Subsidiary of Nutrien Ltd.)  
13131 Lake Fraser Drive, S.E.  
Calgary, Alberta, Canada, T2J 7E8

Agrium U.S. Inc. (A Subsidiary of Nutrien Ltd.)  
5296 Harvest Lake Drive  
Loveland, CO 80538

Company phone number (North America):  
1-800-403-2861 (Customer Service)

**Emergency telephone number (with hours of operation)** :  Nutrien 24 Hr Emergency Telephone Numbers:  
English:  
Transportation Emergencies: 1-800-792-8311  
Medical Emergencies: 1-303-389-1653

French or Spanish:  
Transportation or Medical Emergencies: 1-303-389-1654

### Section 2. Hazard identification

**Classification of the substance or mixture** : EYE IRRITATION - Category 2B

**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 Aplicable.**  
**Non applicable.**

**Signal word** : Warning

**Hazard statements** : Causes eye irritation.

**Precautionary statements**

**General** : Not applicable.

**Prevention** : Wash hands thoroughly after handling.

## Section 2. Hazard identification

**Response** : IF IN EYES: 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.

**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

**Substance/mixture** : Mixture

| Ingredient name  | % (w/w) | CAS number |
|------------------|---------|------------|
| Ammonium nitrate | 45      | 6484-52-2  |
| Urea             | 35      | 57-13-6    |
| Water            | 20      | 7732-18-5  |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**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. Exposures to eye irritants 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** : 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.

## Section 4. First-aid measures

- 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.

### 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** : Not an oxidizer at the manufactured concentration. It may become an oxidizing liquid if concentrated by evaporation. 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 (NH<sub>3</sub>, N<sub>2</sub>O, N<sub>2</sub>...). 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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- 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).

### Methods and materials for containment and cleaning up

- Small spill** : Use personal protective equipment as required. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Use personal protective equipment as required. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Pump spilled material to a suitable, labeled container for recycling or disposal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 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. Incompatible with copper alloys. May form corrosive sludge on prolonged storage. Contact your sales representative or a metallurgical specialist to ensure compatibility with your equipment.

While UAN 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 UAN solution pumps are thermally protected against exceeding a temperature of 66 deg. C (150 deg. F). Also ensure that piping systems, if insulated, are not externally heated (heat traced). 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 systems, 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

#### Occupational exposure limits

| Ingredient name           | Exposure limits |
|---------------------------|-----------------|
| Canadian Regulations:     | None assigned.  |
| U.S. Federal Regulations: | None assigned.  |

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**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. Appropriate techniques should be used to remove potentially contaminated clothing. 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** : The personal protective equipment required varies, depending upon your risk assessment. 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. No special measures are typically indicated.

**Body protection** : The personal protective equipment required varies, depending upon your risk assessment. 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. Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose.

## Section 8. Exposure controls/personal protection

- Other skin protection** : Hazard of slipping on spilled product. 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. Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose.
- 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. 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.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear to slightly hazy liquid.]
- Color** : Not available.
- Odor** : Ammoniacal. [Slight]
- Odor threshold** : Not available.
- pH** : 6 to 7
- Melting point** : -2°C (28.4°F)
- Boiling point** : 121°C (249.8°F)
- Flash point** : [Product does not sustain combustion.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Non-combustible. Decomposes on heating. Evolves toxic fumes when heated to decomposition.
- Lower and upper explosive (flammable) limits** : Not applicable.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.32
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Solubility in water** : Water-soluble liquid
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not applicable.
- Viscosity** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : Not an oxidizer at the manufactured concentration. It may become an oxidizing liquid if concentrated by evaporation. Keep away from incompatible materials.
- 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** : Do not allow to dry out. Avoid high temperatures in combination with high pressures.



## Section 10. Stability and reactivity

**Incompatible materials** : Adequate, well engineered systems must be provided for the safe storage, transfer and use of this product. May be incompatible with some materials of construction. Incompatible with copper alloys, copper, and zinc. May form corrosive sludge on prolonged storage. Incompatible with halogens. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

**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

| Product/ingredient name        | Result      | Species            | Dose        | Exposure |
|--------------------------------|-------------|--------------------|-------------|----------|
| Urea Ammonium Nitrate Solution | LD50 Dermal | Rat - Male, Female | >5000 mg/kg | -        |
| Ammonium nitrate               | LD50 Oral   | Rat                | 2217 mg/kg  | -        |
|                                | LD50 Oral   | Rat - Male, Female | 2950 mg/kg  | -        |
| Urea                           | LD50 Oral   | Rat                | 8471 mg/kg  | -        |
| Water                          | LD50 Oral   | Rat                | >90 g/kg    | -        |

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

#### Irritation/Corrosion

| Product/ingredient name | Result                           | Species | Score | Exposure | Observation |
|-------------------------|----------------------------------|---------|-------|----------|-------------|
| Ammonium nitrate        | Skin                             | Rabbit  | 0     | -        | 72 hours    |
|                         | Eyes - Edema of the conjunctivae | Rabbit  | 3     | -        | 3 days      |

#### Conclusion/Summary

**Skin** : Non-irritating to the skin.

**Eyes** : Irritating to the eyes.

#### Sensitization

| Product/ingredient name | Route of exposure | Species | Result          |
|-------------------------|-------------------|---------|-----------------|
| Ammonium nitrate        | Skin              | Mouse   | Not sensitizing |

#### Conclusion/Summary

**Skin** : Non-sensitizer.

**Respiratory** : Not available.

#### Mutagenicity

| Product/ingredient name | Test                                                                                                   | Experiment                                                                               | Result               |
|-------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------|
| Ammonium nitrate        | OECD 471 Bacterial Reverse Mutation Test<br>OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test | Experiment: In vitro Subject: Bacteria<br>Experiment: In vitro Subject: Mammalian-Animal | Negative<br>Negative |

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

#### Carcinogenicity

Not available.

**Conclusion/Summary** : No known significant effects or critical hazards. Potential for nitrosamine formation if ingested. Do not ingest.

#### Reproductive toxicity

## Section 11. Toxicological information

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species            | Dose                | Exposure |
|-------------------------|-------------------|-----------|-------------------|--------------------|---------------------|----------|
| Ammonium nitrate        | Negative          | Negative  | Negative          | Rat - Male, Female | Oral:<br>1500 mg/kg | -        |

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

### Teratogenicity

| Product/ingredient name | Result          | Species      | Dose       | Exposure |
|-------------------------|-----------------|--------------|------------|----------|
| Ammonium nitrate        | Negative - Oral | Rat - Female | 1500 mg/kg | -        |

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

### 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** : Routes of entry anticipated:  
Oral  
Eye contact

### 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



## Section 11. Toxicological information

**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.

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

## Section 12. Ecological information

### Toxicity

| Product/ingredient name                   | Result                                | Species                                      | Exposure |
|-------------------------------------------|---------------------------------------|----------------------------------------------|----------|
| Urea Ammonium Nitrate Fertilizer Solution | NOEC >1700 mg/l Marine water          | Algae                                        | 10 days  |
| Ammonium nitrate<br>Urea                  | Acute EC50 490 mg/l Fresh water       | Daphnia                                      | 48 hours |
|                                           | Acute LC50 447 mg/l Fresh water       | Fish                                         | 48 hours |
|                                           | Chronic NOEC 6 to 12 mg/l Fresh water | Crustaceans - Cladocera                      | 21 days  |
|                                           | Acute EC50 3910000 µg/l Fresh water   | Daphnia - Daphnia magna - Neonate            | 48 hours |
|                                           | Acute LC50 1000 mg/l Marine water     | Crustaceans - Chaetogammarus marinus - Young | 48 hours |
|                                           | Acute LC50 5000 µg/l Fresh water      | Fish - Colisa fasciata - Fingerling          | 96 hours |
|                                           | Chronic NOEC 2 g/L Fresh water        | Fish - Heteropneustes fossilis               | 30 days  |

**Conclusion/Summary** : Practically non-toxic to aquatic organisms. Very low acute toxicity to fish.

### Persistence and degradability

**Conclusion/Summary** : According to EC criteria: Readily biodegradable

| Product/ingredient name                   | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------------------------|-------------------|------------|------------------|
| Urea Ammonium Nitrate Fertilizer Solution | -                 | -          | Readily          |

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| Urea                    | <-1.73             | -   | low       |
| Water                   | -1.38              | -   | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>TDG<br/>Classification</b> | <b>DOT<br/>Classification</b> | <b>Mexico<br/>Classification</b> | <b>IMDG</b>    | <b>IATA</b>    |
|-----------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.                | Not regulated.                | Not regulated.                   | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                             | -                             | -                                | -              | -              |
| <b>Transport hazard class(es)</b> | -                             | -                             | -                                | -              | -              |
| <b>Packing group</b>              | -                             | -                             | -                                | -              | -              |
| <b>Environmental hazards</b>      | No.                           | No.                           | No.                              | No.            | No.            |
| <b>Additional information</b>     | -                             | -                             | -                                | -              | -              |

**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

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : The following components are listed: Ammonia (total)

**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.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

## Section 15. Regulatory information

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

|                          |                                          |
|--------------------------|------------------------------------------|
| <b>Australia</b>         | : All components are listed or exempted. |
| <b>China</b>             | : All components are listed or exempted. |
| <b>Europe</b>            | : All components are listed or exempted. |
| <b>Japan</b>             | : All components are listed or exempted. |
| <b>Malaysia</b>          | : Not determined.                        |
| <b>New Zealand</b>       | : All components are listed or exempted. |
| <b>Philippines</b>       | : All components are listed or exempted. |
| <b>Republic of Korea</b> | : All components are listed or exempted. |
| <b>Taiwan</b>            | : All components are listed or exempted. |
| <b>Turkey</b>            | : Not determined.                        |

**U.S. Federal Regulations:** : **TSCA 4(a) final test rules:** Biuret; Urea, reaction products with formaldehyde  
**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  
 Delayed (chronic) health hazard.

### Composition/information on ingredients

| Name             | %         | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard. |
|------------------|-----------|-------------|----------------------------|----------|---------------------------------|----------------------------------|
| Ammonium nitrate | ≥25 - <50 | No.         | No.                        | No.      | Yes.                            | No.                              |

### SARA 313

|                                        | Product name     | CAS number | %  |
|----------------------------------------|------------------|------------|----|
| <b>Form R - Reporting requirements</b> | Ammonium nitrate | 6484-52-2  | 45 |
| <b>Supplier notification</b>           | Ammonium nitrate | 6484-52-2  | 45 |

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

## Section 15. Regulatory information

|                            |                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------|
| <b>Massachusetts</b>       | : The following components are listed: Ammonium nitrate                             |
| <b>New York</b>            | : None of the components are listed.                                                |
| <b>New Jersey</b>          | : The following components are listed: Ammonium nitrate; Nitric acid ammonium salt. |
| <b>Pennsylvania</b>        | : The following components are listed: Nitric acid ammonium salt.                   |
| <b>California Prop. 65</b> | : Not listed.                                                                       |

## Section 16. Other information

### History

|                                       |             |
|---------------------------------------|-------------|
| <b>Date of issue/Date of revision</b> | : 6/13/2018 |
| <b>Date of previous issue</b>         | : 1/1/2018  |
| <b>Version</b>                        | : 2.5       |

Indicates information that has changed from previously issued version.

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key to abbreviations</b> | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations<br>HPR = Hazardous Products Regulations |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Procedure used to derive the classification

| Classification               | Justification      |
|------------------------------|--------------------|
| EYE IRRITATION - Category 2B | Weight of evidence |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>References</b> | : Transportation of Dangerous Goods Act and Clear Language Regulations, current edition at time of SDS preparation, Transport Canada;<br>Hazardous Products Act and Regulations, current revision at time of SDS preparation, Health Canada;<br>Domestic Substances List, current revision at time of SDS preparation, Environment Canada;<br>29 CFR Part 1910, current revision at time of SDS preparation, U.S. Occupational Safety and Health Administration;<br>40 CFR Parts 1-799, current revision at time of SDS preparation, U.S. Environmental Protection Agency;<br>49 CFR Parts 1-199, current revision at time of SDS preparation, U.S. Department of Transport;<br>Mexican Official Standard NOM-018-STPS-2015, Harmonised System for the Identification and Communication of Hazards and Risks by Hazardous Chemicals in the Workplace;<br>Mexican Official Standard NOM-002-SCT / 2011, List of the most commonly transported hazardous substances and materials;<br>Threshold Limit Values for Chemical Substances, current edition at time of SDS preparation, American Conference of Governmental Industrial Hygienists;<br>NFPA 400, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;<br>NFPA 704, National Fire Codes, National Fire Protection Association, current edition at time of SDS preparation;<br>Corrosion Data Survey, Sixth Edition, 1985, National Association of Corrosion Engineers;<br>ERG 2016, Emergency Response Guidebook, U.S. Department of Transport, Transport Canada, and the Secretariat of Transportation and Communications of Mexico<br>Hazardous Substances Data Bank, current revision at time of SDS preparation, |
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## Section 16. Other information

National Library of Medicine, Bethesda, Maryland  
Integrated Risk Information System, current revision at time of SDS preparation, U. S. Environmental Protection Agency, Washington, D.C.  
Pocket Guide to Chemical Hazards, current revision at time of SDS preparation, National Institute for Occupational Safety and Health, Cincinnati, Ohio ;  
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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

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