

## Ammonium Nitrate, Prilled Industrial Grade, Low Density

### Section 1. Identification

**Product identifier** : Ammonium Nitrate, Prilled Industrial Grade, Low Density  
**SDS #** : 300  
**Other means of identification**  
**Synonyms** : Low Density Ammonium Nitrate  
**Product code(s)** : ANPRLLD  
**Product type** : Solid.

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

Identified uses	
Manufacture of chemical products. Professional use in formulation of preparations and end-use.	
Uses advised against	Reason
Consumer use. Restricted to professional users.	U.S. and Canadian Federal regulations

**Supplier's details** : PCS Sales (USA), Inc. (A Subsidiary of Nutrien Ltd.)  
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**Emergency telephone number (with hours of operation)** : Nutrien North American  
 24 HOUR 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** : OXIDIZING SOLIDS - Category 3  
 EYE IRRITATION - Category 2A  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### GHS label elements

**Hazard pictograms** :



## Section 2. Hazard identification

<b>Signal word</b>	: Warning
<b>Hazard statements</b>	: May intensify fire; oxidizer. Causes serious eye irritation.
<b><u>Precautionary statements</u></b>	
<b>General</b>	: Not applicable.
<b>Prevention</b>	: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wash hands thoroughly after handling.
<b>Response</b>	: 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.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: None known.
<b>Other hazards which do not result in classification</b>	: Explosion risk in case of fire. Risk of explosion if heated under confinement. Risk of vigorous reaction, ignition and explosion in contact with combustible or flammable substances.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

Ingredient name	% (w/w)	CAS number
Ammonium nitrate	>97.2	6484-52-2

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

<b>Eye contact</b>	: 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.
<b>Inhalation</b>	: 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.
<b>Skin contact</b>	: 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.
<b>Ingestion</b>	: 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

## Section 4. First-aid measures

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 serious eye irritation.
- Inhalation** : No known significant effects or critical hazards. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Persons with asthma may be more sensitive.
- 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:  
pain or irritation  
watering  
redness
- Inhalation** : The substance will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and flammable gases. Decomposition products may include the following materials:  
Ammonia  
nitrogen oxides
- Adverse symptoms may include the following:  
headache  
respiratory tract irritation  
coughing
- Skin contact** : No specific data is available about overexposure under normal working conditions.
- 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 - From Canada or the U.S., 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.

## Section 4. First-aid measures

- 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** : Product with the capacity to undergo self-sustaining and progressive thermal decomposition. The product acts as an oxidizing agent, and supports combustion by liberating oxygen even if smothered. Evacuate area and fight fire remotely due to the risk of explosion. Use flooding quantities of water.

- Unsuitable extinguishing media** : Do not attempt to smother the fire. The product acts as an oxidizing agent, and supports combustion by liberating oxygen even if smothered. Do not use CO<sub>2</sub>, dry chemicals, foam, or water fog.

- Specific hazards arising from the chemical** : May intensify fire; oxidizer. Molten ammonium nitrate presents an elevated risk of explosion if heated under confinement, if impacted by falling debris, or if contaminated by incompatible substances or organic matter including wood, asphalt, or other structural construction materials.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
nitrogen oxides  
Ammonia

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons at least 800 meters (1/2 mile) from the vicinity of the incident if there is a fire. Assign emergency response personnel to guard the exclusion perimeter in all directions from the incident site.

If responding to a fire and the structure or vehicle is significantly involved, set up and use unmanned hose holders or monitor nozzles. Emergency responders should control remote firefighting apparatus from a location offering protection against possible explosion. Maintain the maximum possible distance from the fire consistent with the use of fire-fighting equipment. Apply flooding quantities of water to the ammonium nitrate until the fire is out, to cool the product and reduce risk of deflagration.

If safe to do so, ventilate the structure to minimize heat and pressure. Move containers from fire area if this can be done without risk. If safe firefighting is impossible, withdraw from area and let the fire burn.

Refer to the NFPA 400 Hazardous Materials Code Annex E for further information on the safe handling of ammonium nitrate and suggested firefighting procedures.

- 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** : Contain and collect the water used to fight the fire for later treatment and disposal.

## 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. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. 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".

## 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).

### Methods and materials for containment and cleaning up

- Small spill** : Use suitable protective equipment (section 8). Move containers from spill area. Avoid dust generation. Use appropriate equipment to put the spilled substance in a container for reuse or disposal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Put on appropriate personal protective equipment (see Section 8). Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Use appropriate equipment to put the spilled substance in a container for reuse or disposal. Avoid dust generation. Do not dry sweep. Recycle to process, if possible.  
or  
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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. May form steep piles that can collapse without warning when stored in bulk. Avoid forming steep slopes when removing product. Ensure that bulk bags or smaller packaged products stored in tiers are stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, rolling, or collapse. Use caution when opening truck or railcar doors as product may have shifted during transport.

Must be stored in a dry location. Absorbs moisture on long-term storage under high humidity conditions. Store away from incompatible materials (see Section 10). When product is stored in sealable containers, keep container tightly closed and sealed until ready for use. Sealable containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Ensure compliance with OSHA 29CFR1910.109 requirements.

Separate from reducing agents and combustible materials. Use appropriate containment to avoid environmental contamination. 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
<b>Canadian Regulations::</b> Ammonium nitrate  <b>U.S. Federal Regulations::</b> Ammonium nitrate	<b>Alberta TWA:</b> 10 mg/m <sup>3</sup> Inhalable, 3 mg/m <sup>3</sup> Respirable, for Particles Not Otherwise Regulated.  <b>OSHA (United States):</b> Particulates not otherwise regulated (PNOR) TWA (8 hours), Total dust: 15 mg/m <sup>3</sup> ; Respirable fraction: 5 mg/m <sup>3</sup> .

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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: sealed eyewear
- 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.
- 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. Recommended: disposable overall
- 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** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. 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** : Granular solid.
- Color** : White.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : 5 to 6 [Conc. (% w/w): 2%]
- Melting point** : 169.6°C (337.3°F)

## Section 9. Physical and chemical properties

<b>Boiling point</b>	: Decomposition temperature: >210°C (>410°F)
<b>Flash point</b>	: Not applicable.
<b>Burning time</b>	: Not applicable. Decomposes.
<b>Evaporation rate</b>	: Not applicable.
<b>Flammability (solid, gas)</b>	: Non-flammable.
<b>Lower and upper explosive (flammable) limits</b>	: Not applicable. Inorganic salt.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: 1.72 g/cm <sup>3</sup> Bulk density 48 - 52 lbs/ft <sup>3</sup>
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: 1900 g/l
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: >210°C (>410°F)
<b>Viscosity</b>	: Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: The pure product is stable at normal storage temperatures and pressures. May react explosively when mixed with chlorinated materials such as hypochlorites. May react explosively even in the absence of air at elevated pressure and/or temperature.  Reactive or incompatible with the following materials: Flammable material Combustible material. Metal powder. Metal salt. halogenated compounds acids alkalis
<b>Chemical stability</b>	: The pure product is stable at normal storage temperatures and pressures.
<b>Possibility of hazardous reactions</b>	: Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: Contact with incompatible materials such as acids, alkalis, heavy metal compounds and reducing agents, will result in hazardous decomposition. Contact with combustible materials Fire or heat  Reactions may include the following: risk of causing or intensifying fire hazardous decomposition pressure build-up risk of explosion with or without contact with air
<b>Conditions to avoid</b>	: Prevent product contamination. Avoid contamination by any source including metals, dust and organic materials. Avoid high temperatures in combination with high pressures. Refer to NFPA 400 Hazardous Materials Code for further information on the safe storage and handling of hazardous materials.
<b>Incompatible materials</b>	: See above.

## Section 10. Stability and 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

Product/ingredient name	Result	Species	Dose	Exposure
Ammonium nitrate	LD50 Oral	Rat	2217 mg/kg	-
	LD50 Oral	Rat - Male, Female	2950 mg/kg	-
-	LD50 Dermal	Rat - Male, Female	>5000 mg/kg	-

**Conclusion/Summary** : Not available. Very low toxicity to humans or animals. Effects are not sufficient for classification as hazardous.

#### 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.

**Respiratory** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

#### Sensitization

Product/ingredient name	Route of exposure	Species	Result
Ammonium nitrate	skin	Mouse	Not sensitizing

#### Conclusion/Summary

**Skin** : Non-sensitizer.

**Respiratory** : Non-sensitizer.

#### Mutagenicity

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

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

#### Carcinogenicity

Not available.

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

#### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Ammonium nitrate	Negative	Negative	Negative	Rat - Male, Female	Oral: 1500 mg/kg	53 days; 7 days per week

**Conclusion/Summary** : Not considered to be toxic to the reproductive system.



## Section 11. Toxicological information

### Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Ammonium nitrate	Negative - Oral	Rat - Female	1500 mg/kg	53 days

**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** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Persons with asthma may be more sensitive.

**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:  
pain or irritation  
watering  
redness

**Inhalation** : The substance will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and flammable gases. Decomposition products may include the following materials:  
Ammonia  
nitrogen oxides

Adverse symptoms may include the following:  
headache  
respiratory tract irritation  
coughing

**Skin contact** : No specific data is available about overexposure under normal working conditions.

**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

## Section 11. Toxicological information

**Potential immediate effects** : Eye irritation  
Infant-methemoglobinemia

**Potential delayed effects** : Not available.

### 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
Ammonium nitrate -	Chronic NOEC 6 to 12 mg/l Fresh water NOEC >1700 mg/l Marine water Acute EC50 490 mg/l Fresh water Acute LC50 447 mg/l Fresh water	Crustaceans - Cladocera Algae Daphnia Fish	21 days 10 days 48 hours 48 hours

**Conclusion/Summary** : Very low acute toxicity to fish. May be harmful to the environment if released in large quantities. Excessive nutrient runoff to a body of water may result in eutrophication.

### Persistence and degradability

**Conclusion/Summary** : Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Ammonium nitrate	-	-	Readily

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not applicable. Inorganic salt. Bioaccumulative potential - low

**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. 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

## Section 13. Disposal considerations

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 Classification</b>	<b>DOT Classification</b>	<b>Mexico Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	1942	1942	1942	1942	1942
<b>UN proper shipping name</b>	Ammonium nitrate, with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance (ammonium nitrate, solid)	Ammonium nitrate, with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance (ammonium nitrate, solid)	Ammonium nitrate, with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance solid	Ammonium nitrate, with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	Ammonium nitrate, with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance
<b>Transport hazard class(es)</b>	5.1 	5.1 	5.1 	5.1 	5.1 
<b>Packing group</b>	III	III	III	III	III
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	<p><b><u>Explosive Limit and Limited Quantity Index</u></b> 5</p> <p><b><u>Passenger Carrying Road or Rail Index</u></b> 25</p> <p><b><u>Special provisions</u></b> Special Provisions re TDG: 37</p> <p>Classification per the current revision, Transportation of Dangerous Goods Regulation, Part 2, Sec 2.3.</p>	<p><b><u>Packaging instruction</u></b> <b>Passenger aircraft</b> Quantity limitation: 25 kg</p> <p><b>Cargo aircraft</b> Quantity limitation: 100 kg</p> <p><b><u>Special provisions</u></b> A1, A29, B120, IB8, IP3, T1, TP33</p> <p>Classification per the current revision, Transportation of Dangerous Goods Regulation, Part 2, Sec 2.3.</p>	-	<p><b><u>Emergency schedules (EmS)</u></b> F-H, S-Q</p>	<p><b><u>Passenger and Cargo Aircraft</u></b> Quantity limitation: 25 kg Packaging instructions: 516</p> <p><b><u>Cargo Aircraft Only</u></b>Quantity limitation: 100 kg Packaging instructions: 518</p> <p><b><u>Limited Quantities - Passenger Aircraft</u></b>Quantity limitation: 10 kg Packaging instructions: Y516</p>

## Section 14. Transport information

**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 (NH<sub>3</sub> — CAS RN 7664-41-7) and the ammonium ion (NH<sub>4</sub><sup>+</sup> — 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.

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

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

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** : This material is listed or exempted.

**Japan** : All components are listed or exempted.

**Malaysia** : All components are listed or exempted.

**New Zealand** : All components are listed or exempted.

**Philippines** : All components are listed or exempted.

**Republic of Korea** : All components are listed or exempted.

**Taiwan** : All components are listed or exempted.

**Turkey** : Not determined.

**U.S. Federal Regulations:** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**TSCA 8(b) Active 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

## Section 15. Regulatory information

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304 Composition/information on ingredients

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Immediate (acute) health hazard

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard.
Ammonium nitrate	>97.2	Yes.	No.	No.	Yes.	No.

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	Ammonium nitrate	6484-52-2	100
<b>Supplier notification</b>	Ammonium nitrate	6484-52-2	100

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** : This product, as manufactured, does NOT contain any substance in concentrations known to the state of California to cause cancer, birth defects or other reproductive harm. Nutrien cannot guarantee the downstream compliance of any product once out of Nutrien custody.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 3/13/2019

**Date of previous issue** : 1/17/2019

**Version** : 2.1

📌 Indicates information that has changed from previously issued version.

- 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
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - UN = United Nations
  - HPR = Hazardous Products Regulations

### Procedure used to derive the classification

**Section 16. Other information**

Classification	Justification
OXIDIZING SOLIDS - Category 3 EYE IRRITATION - Category 2A	Expert judgment On basis of test data

**References** :

- Transportation of Dangerous Goods Act and Clear Language Regulations, current edition at time of SDS preparation, Transport Canada;
- Hazardous Products Act and Regulations, current revision at time of SDS preparation, Health Canada;
- Domestic Substances List, current revision at time of 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;
- Mexican Official Standard NOM-018-STPS-2015, Harmonised System for the Identification and Communication of Hazards and Risks by Hazardous Chemicals in the Workplace;
- NORMA Oficial Mexicana NOM-010-STPS-2014, Agentes químicos contaminantes del ambiente laboral-Reconocimiento, evaluación y control.
- Mexican Official Standard NOM-002-SCT / 2011, List of the most commonly transported hazardous substances and materials;
- 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
- 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 ;
- 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
- California Code of Regulations, Title 27, Div 4, Chapter 1, Proposition 65 Aug 30, 2018 rev and current updates
- The Fertilizer Institute, Product Toxicology Testing Program Results, TFI, Washington , D.C., 2003

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**The information and recommendations contained in this Safety Data Sheet ("SDS") relate only to the specific material referred to herein (the "Material") and do not relate to the use of such Material in combination with any other material or process. The information and recommendations contained herein are believed to be current and correct as of the date of this SDS. HOWEVER, THE INFORMATION AND RECOMMENDATIONS ARE PRESENTED WITHOUT WARRANTY, REPRESENTATION OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THEIR ACCURACY, CORRECTNESS OR COMPLETENESS, AND THE SELLER, SUPPLIER AND MANUFACTURER OF THE MATERIAL AND THEIR RESPECTIVE AFFILIATES (COLLECTIVELY, THE "SUPPLIER") DISCLAIM ALL LIABILITY FOR RELIANCE ON SUCH INFORMATION AND**

## Section 16. Other information

**RECOMMENDATIONS.** This SDS is not a guarantee of safety. A buyer or user of the Material (a "Recipient") is responsible for ensuring that it has all current information necessary to safely use the Material for its specific purpose.

**FURTHERMORE, THE RECIPIENT ASSUMES ALL RISK IN CONNECTION WITH THE USE OF THE MATERIAL. THE RECIPIENT ASSUMES ALL RESPONSIBILITY FOR ENSURING THE MATERIAL IS USED IN A SAFE MANNER IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL, HEALTH, SAFETY AND SECURITY LAWS, POLICIES AND GUIDELINES. THE SUPPLIER DOES NOT WARRANT THE MERCHANTABILITY OF THE MATERIAL OR THE FITNESS OF THE MATERIAL FOR ANY PARTICULAR USE AND ASSUMES NO RESPONSIBILITY FOR INJURY OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY OR RELATED TO THE USE OF THE MATERIAL.**