



Ammonium Nitrate Fertilizer

Safety Data Sheet

Classified according to the UN-GHS as adopted in the US Hazard Communication Standard (HCS 2012), the Canada Hazardous Products Regulations (WHMIS 2015), Mexico NOM-018-STPS-2015.
Revision Date: 4 June 2024 Date of issue: 4 June 2024 Supersedes Date: 23 June 2023 Version: 4.2

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: Amtrate™ - Ammonium Nitrate Fertilizer

CAS No: 6484-52-2

Formula: NH₄NO₃

Synonyms: AN, Fertilizer Grade Ammonium Nitrate (FGAN), High Density Ammonium Nitrate, Ag Grade Ammonium Nitrate

STCC: 4918311

1.2. Intended Use of the Product

Uses of the substance/mixture: Fertilizer

Uses advised against: Consumer use

1.3. Name, Address, and Telephone of the Responsible Party

Company

CF Industries

2375 Waterview Drive

Northbrook, Illinois, USA

847-405-2400

www.cfindustries.com

1.4. Emergency Telephone Number

Emergency : 800-424-9300

Number For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Ox. Sol. 3 H272

Eye Irrit. 2A H319

Full text of H-phrases: see Section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :



GHS03



GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H272 - May intensify fire; oxidizer.

H319 - Causes serious eye irritation.

Precautionary Statements (GHS-US) : P210 - Keep away from extremely high temperatures, ignition sources, and incompatible materials. No smoking.

P221 - Take any precaution to avoid mixing with combustible material, oxidizable materials, and incompatible materials.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P280 - Wear protective gloves, protective clothing, and eye protection.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of incipient fire: Flood ammonium nitrate fertilizer with large volumes of low pressure water to extinguish fire and cool the ammonium nitrate after fire is extinguished. Do not fight fires beyond the incipient stage.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

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2.3. Other Hazards

Contact with combustible material will increase fire hazard. May undergo detonation if heated under confinement causing pressure buildup or if subjected to strong shocks. Solid ammonium nitrate when sensitized or during decomposition may become unstable and/or explosive. When ammonium nitrate is heated to decomposition, it may produce vapors which contain nitrogen oxides (NO_x).

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Overexposure may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Ammonium nitrate	(CAS No) 6484-52-2	98 - 100	Ox. Sol. 3, H272 Eye Irrit. 2A, H319
Magnesium nitrate	(CAS No) 10377-60-3	< 2	

3.2. Mixture

Not applicable

Full text of H-phrases: see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Eye irritation.

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: Ammonium Nitrate: Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and possibly shock.

Chronic Symptoms: Overexposure to this material may result in methemoglobinemia.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. Hot Ammonium Nitrate burns skin, allowing rapid absorption of Ammonium Nitrate through the skin and toxic effects can occur quite rapidly. Causes methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue in addition to thermal burn treatment.

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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Flood fires involving ammonium nitrate fertilizer with large volumes of low pressure water. The duration of the water supply must be a minimum of 2 hours.

Unsuitable Extinguishing Media: Do not use salt water, carbon dioxide, dry chemicals or foam extinguishers. Never attempt to smother fire, such as by sealing off, closing a compartment, or building's doors when fire occurs. Do not add steam.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Ammonium nitrate is an oxidizer and as such may increase the flammability and/or explosiveness of other substances.

Explosion Hazard: May undergo detonation if heated under confinement causing pressure buildup and/or if subjected to strong shocks. Solid ammonium nitrate when sensitized or during decomposition may become unstable and/or explosive. Contamination of ammonium nitrate with oil, diesel fuel, charcoal, sulfur, metal fines or other combustible substances could possibly cause an explosion.

Reactivity: Contact with combustible material will increase fire hazard. Smothering or contact with organic material may cause an explosive situation.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Pre-incident planning by the fire department and/or emergency management officials should be developed for every ammonium nitrate storage facility and must include a plan for the Incident Commander to decide when an evacuation is the best course of action. Pre-incident planning and emergency response procedures should account for toxic gaseous products of decomposition, fire effluents, and potential for explosions.

Firefighting Instructions: Do Not fight fires involving Ammonium Nitrate that have progressed beyond the incipient stage. Emergency response for fires involving ammonium nitrate that have progressed beyond the incipient stage should focus on evacuation to a safe distance of 1 mile and allow the structure or vehicle to burn to completion. Only incipient fires in areas or vehicles where ammonium nitrate is stored or transported should be attacked using manual fire extinguishing methods that require human operators (fire extinguishers, hose streams, etc.).

Water is the only satisfactory extinguishing material for fires involving Ammonium Nitrate. It is important that the mass be kept cool and that burning materials be promptly extinguished. Large volumes of water should be applied as quickly as possible. This is best accomplished by automatic fire extinguishing systems and not the use of manual suppression means (fire hoses, water streams, etc.) that require fire-fighter actions. Normally ventilation and the application of water, including automatic sprinklers, can quickly desensitize and stabilize hot Ammonium Nitrate material. Never attempt to smother a fire involving Ammonium Nitrate, such as by sealing off, closing a compartment or building door when fire occurs.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Positive pressure self-contained breathing apparatus (SCBA) should be used when there is a potential for inhalation of vapors and/or fumes.

Hazardous Combustion Products: Nitrogen oxides. Carbon oxides (CO, CO₂). Ammonia. Nitric Acid. Highly toxic and corrosive gases are released.

Other Information: Firewater should be contained and prevented from leaving the site and entering streams, lakes, and rivers.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Keep away from combustible material. Spill control for ammonium nitrate solids and liquids shall be in accordance with facility operating procedures to prevent discharge or contamination of the ammonium nitrate material. Spilled material, if uncontaminated, can be salvaged by placing into a clean bag or bin for reuse.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

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Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Collect spillage. Spilled ammonium nitrate fertilizer can be reused if kept dry and uncontaminated.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Keep combustibles (wood, paper, oil, etc.) and incompatible materials away from spilled material. Spills that have become contaminated with organic matter or other combustible material may present a fire and explosion hazard. Such material should be shoveled into drums and dissolved in water to obtain at least 50% water solution. After cleaning, flush traces away with water.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Keep away from open flames, hot surfaces and sources of ignition. When heated to melting and decomposition ammonium nitrate emits nitrous oxide and water vapors and may explode if confined. Avoid dust production as ammonium nitrate is hygroscopic and dusts will absorb water from the atmosphere and form caked material more easily than larger particles. Also, ammonium nitrate dust is more difficult to handle and when spilled can become contaminated. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. See *NFPA 400: Hazardous Materials Code* (latest edition) for all the fire and life safety requirements applicable to handling, storage, and use of this material.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Always wear appropriate personal protective equipment when handling oxidizers such as ammonium nitrate.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Ensure Ammonium Nitrate is stored in accordance with all applicable local, regional, national, provincial, and territorial regulations, including 29 CFR 1910.109(i). Contact your local authority having jurisdiction to determine any additional specific handling, storage and approval requirements. See *NFPA 400: Hazardous Materials Code* (latest edition) for all the fire and life safety requirements applicable to handling, storage, and use of this material.

Storage Conditions: Ammonium nitrate should be stored in separate buildings or storage areas separated from combustible materials by approved fire barrier wall with a minimum fire resistance rating of 2 hours and the exterior wall of the exposed side of Ammonium Nitrate storage buildings shall not be within 50 feet (15.2 m) of a combustible building unless other risk mitigations are approved by the authority having jurisdiction.

Store in well-ventilated area away from acute fire hazards and easily oxidizable materials. Avoid contamination. Do not store near dynamite, blasting caps or other explosives. Store away from combustible materials, extremely high temperatures, compressed flammable gases, pyrophoric materials, corrosive materials, flammable and combustible liquids, ignition sources, incompatible and/or contaminating materials.

Incompatible Materials: The following list is not comprehensive but represents materials identified from multiple resources such as NFPA 400 (most recent edition): Acids, Acetic Anhydride, Alkali Metals, Aluminum + Calcium Nitrate, Aluminum, Ammonium Chloride, Ammonium Dichromate, Ammonium Phosphate + Potassium, Animal fats, Antimony, Bagged or Baled combustibles (cotton, rags, paper, seeds), Barium Chloride, Bismuth, Bleaching powders or chemicals, Brass or Bronze, Burlap, Cadmium, Camphor, Caustic soda, Charcoals, Chlorides, Chromium, Coal, Coke, Cobalt, Copper Iron II Sulfide, Copper, Cork, Cyanoguanidine, Diesel fuel and oils, Finely divided or powdered metals, Fibers, Fish oils, Fish meal, Foam rubber, Hay, Hydrocarbon Oils, Iron, Lead, Lubricating oil, Magnesium, Manganese, Naphthalene, Nickel, Oakum, Oiled materials (clothing, paper, textiles), Organic Chemicals, Paint, Phosphorus, Potassium Chromate, Potassium Dichromate, Potassium Nitrate, Potassium Nitrite, Potassium Permanganate, Seed or vegetable oils of any type, Sawdust, Seeds, Sodium Chloride, Sodium Perchlorate, Straw, Sugar, Sulfide Ores, Sulfur, Tin, Titanium, Trinitroanisole, Wood Chips or shavings, and Zinc.

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Storage Area: Storage construction should be of non-combustible materials and should be equipped with an automatic sprinkler system if constructed of combustible materials (see NFPA 400: Hazardous Materials Code (latest edition)). Ammonium nitrate storage buildings shall be equipped with an approved fire detection system. Storage areas shall be clearly identified by signs reading AMMONIUM NITRATE. Additionally, signs shall be conspicuously posted on the ammonium nitrate storage building stating: DO NOT FIGHT FIRE - EXPLOSION HAZARD.

All flooring in ammonium nitrate Storage buildings and handling areas shall be free of open drains, traps, tunnels, pits, or pockets to prohibit the accumulation of flowing molten ammonium nitrate in the event of a fire. Flooring shall be constructed of non-combustible materials such as concrete unless the facility floor has been protected from ammonium nitrate impregnation. Floors constructed of combustible materials should be identified as a risk during a pre-incident plan review with the local authority having jurisdiction. Floor drains, recesses or other areas of possible confinement should be eliminated to prevent entrapment of flowing molten ammonium nitrate during fire.

Storage should be designed for safe release of pressure by providing adequate ventilation or the building should be of such construction that it will be self-ventilating in the event of a fire. See OSHA memo titled "Guidance on the Ammonium Nitrate Storage Requirements in 29 CFR 1910.109(j)" published December 3, 2014, by the US Department of Labor or NFPA 400: Hazardous Materials Code (latest edition) A.11.2.3, for additional guidance on acceptable ventilation rate models. Storage facilities storing more than 3,000 pounds of ammonium nitrate are subject to Canadian Ammonium Nitrate Storage Regulations, C.R.C., c. 1145 and must comply with Part 20 of the Canadian Explosives Regulations, 2013, SOR/2013-211.

7.3. Specific End Use(s)

Fertilizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in Section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when toxic gases may be released. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Provide sufficient ventilation to keep ammonia vapors below the permissible exposure limit.

Personal Protective Equipment: Protective glasses or goggles. Gloves. Insufficient ventilation: wear respiratory protection. Full protective flameproof clothing.



Materials for Protective Clothing: Flame retardant antistatic protective clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety glasses or goggles.

Skin and Body Protection: Wear body protective covering. Rubber or other chemical resistant boots.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental Exposure Controls: Do not allow the product to be unintentionally released into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Solid prills or granules (hygroscopic solid – absorbs water from air and can dissolve in liquid)
Odor	: Odorless
Odor Threshold	: Not established
pH	: 6 - 7 (10% solution)
Evaporation Rate	: Not available

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Melting/Freezing Point	: 311 - 337°F (155 - 169°C)
Boiling Point	: > 410°F (210°C)
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: 410°F (210°C)
Flammability (solid, gas)	: Not flammable
Lower Flammable Limit	: Not flammable
Upper Flammable Limit	: Not flammable
Vapor Pressure	: Negligible based on melting
Relative Vapor Density at 20 °C	: Negligible based on melting
Bulk Density	: 58-62 lb./ft ³
Specific Gravity	: 1.72 @ 70°F (21°C)
Solubility	: Completely soluble in water Water: By Wt. 66.4% @ 70°F (21°C)
Partition Coefficient: N-Octanol/Water	: Not relevant as substance is inorganic
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Contaminated material may form shock sensitive compounds that may explode when dry.
Molecular Weight	: 80.05

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Ammonium nitrate is stable under normal conditions but starts to dissociate and decompose at temperatures above 410°F (210°C). Upon decomposition, it emits nitrogen oxide (NO_x) and water vapors and may explode if confined. Hazardous decomposition products can include ammonia, oxides of nitrogen, and nitric acid. If the product has been contaminated with another substance, the decomposition temperature and effects of the decomposition may be varied. See Incompatible Materials.

10.2. Chemical Stability

Ammonium nitrate is stable under normal conditions but is an oxidizer and as such may increase the flammability and/or explosiveness of other substances. Ammonium nitrate fertilizer does not have the property of spontaneous combustion. As an oxidizer, ammonium nitrate can support combustion in the absence of atmospheric oxygen, such as poorly ventilated structures. Molten ammonium nitrate is a powerful oxidizer capable of igniting some combustible materials with which it comes into contact and of reacting explosively with organic materials and finely divided metals. Ammonium Nitrate can undergo self-sustaining decomposition when exposed to elevated temperatures including exposure to fire. The rate of self-sustained decomposition can be increased by contamination. Contamination by carbon black, charcoal, finely divided metals, sulfur, or Potash (which liberates chlorine as it decomposes) can catalyze the decomposition mechanism into a self-sustaining internal exothermic reaction that will spread within the Ammonium Nitrate pile creating a zone of decomposition. This reaction can continue and spread through the entire mass even after any actual fire is suppressed.

10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur. Can melt and decompose in a fire with the risk of explosion if contaminated, heated under confinement, or subjected to strong shock.

10.4. Conditions to Avoid

Extremely high temperatures. Heat. Sparks. Overheating. Open flame. Storage in or near combustible materials. Sources of ignition. Confinement. Incompatible materials.

10.5. Incompatible Materials

The following list is not comprehensive but represents materials identified from multiple resources such as NFPA 400 (most recent edition) Acids, Acetic Anhydride, Alkali Metals, Aluminum + Calcium Nitrate, Aluminum, Ammonium Chloride, Ammonium Dichromate, Ammonium Phosphate + Potassium, Animal fats, Antimony, Bagged or Baled combustibles (cotton, rags, paper, seeds), Barium Chloride, Bismuth, Bleaching powders or chemicals, Brass or Bronze, Burlap, Cadmium, Camphor, Caustic soda, Charcoals, Chlorides -, Chromium, Coal, Coke, Cobalt, Copper Iron II Sulfide, Copper, Cork, Cyanoguanidine, Diesel fuel and oils, Finely divided or powdered metals, Fibers, Fish oils, Fish meal, Foam rubber, Hay, Hydrocarbon Oils, Iron, Lead, Lubricating oil, Magnesium, Manganese, Naphthalene, Nickel, Oakum, Oiled materials (clothing, paper, textiles), Organic Chemicals, Paint, Phosphorus, Potassium Chromate, Potassium Dichromate, Potassium Nitrate, Potassium Nitrite, Potassium Permanganate, Seed or vegetable oils of any type, Sawdust, Seeds in bulk, Sodium

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Chloride, Sodium Perchlorate, Straw, Sugar, Sulfide Ores, Sulfur, Tin, Titanium, Trinitroanisole, Wood Chips or shavings, and Zinc.

10.6. Hazardous Decomposition Products

Nitrogen oxides. Toxic vapors. Corrosive vapors. Ammonia. Carbon oxides (CO, CO₂) Nitric acid.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: LD50 (rate) >5000 mg/kg bw/d by ingestion

Skin Corrosion/Irritation: Not classified

pH: 6 - 7 (10% solution)

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: 6 - 7 (10% solution)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and possibly shock.

Chronic Symptoms: Overexposure to this material may result in methemoglobinemia.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ammonium nitrate (6484-52-2)	
LD50 Oral Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 88.8 mg/l/4h
Magnesium nitrate (10377-60-3)	
LD50 Oral Rat	5440 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Can be toxic to aquatic life, and spills may cause algae blooms in static waters. Ammonium nitrate is a plant nutrient. Large scale contamination may kill vegetation and can cause poisoning to livestock and poultry.

12.2. Persistence and Degradability

Amtrate™ - Ammonium Nitrate Fertilizer	
Persistence and Degradability	Not established

12.3. Bioaccumulative Potential

Amtrate™ - Ammonium Nitrate Fertilizer	
Bioaccumulative Potential	Not established.
Ammonium nitrate (6484-52-2)	
BCF Fish 1	No bioaccumulation expected
Log Pow	-3.1 (at 25 °C)

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12.4. Mobility in Soil

Ammonium nitrate is water soluble and may disperse in soil.

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Clean up even minor leaks or spills if possible without unnecessary risk.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name : AMMONIUM NITRATE (with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance)

Hazard Class : 5.1

Identification Number : UN1942

Label Codes : 5.1



Packing Group : III

ERG Number : 140

14.2. In Accordance with IMDG

Proper Shipping Name : AMMONIUM NITRATE (with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance)

Hazard Class : 5.1

Identification Number : UN1942

Label Codes : 5.1

Packing Group : III

EmS-No. (Fire) : F-H

EmS-No. (Spillage) : S-Q



14.3. In Accordance with IATA

Proper Shipping Name : AMMONIUM NITRATE (with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance)

Hazard Class : 5.1

Identification Number : UN1942

Packing Group : III

Label Codes : 5.1



ERG Code (IATA) : 5L

14.4. In Accordance with TDG

Proper Shipping Name : AMMONIUM NITRATE (with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance)

Hazard Class : 5.1

Identification Number : UN1942

Packing Group : III

Label Codes : 5.1



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Amtrate™ - Ammonium Nitrate Fertilizer

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard
Reactive hazard

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Ammonium nitrate (6484-52-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

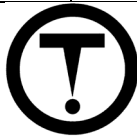
Ammonium nitrate (6484-52-2)

U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
RTK - U.S. - Massachusetts - Right To Know List
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

15.3. Canadian Regulations

Amtrate™ - Ammonium Nitrate Fertilizer

WHMIS Classification	Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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Ammonium nitrate (6484-52-2)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 4 June 2024
Revision Comments : This version contains updates/revisions to the following sections:
• Updated company address

GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Ox. Sol. 3	Oxidizing solids Category 3
H272	May intensify fire; oxidizer
H319	Causes serious eye irritation

NFPA Rating

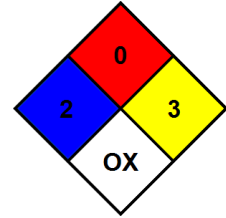
Health Hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
Fire Hazard : 0 - Materials that will not burn.

Ammonium Nitrate Fertilizer

Safety Data Sheet

Classified according to the UN-GHS as adopted in the US Hazard Communication Standard (HCS 2012), the Canada Hazardous Products Regulations (WHMIS 2015), Mexico NOM-018-STPS-2015.

- Reactivity** : 3 - Capable of detonation or explosive reaction, but requires a strong initiating source or must be heated under confinement before initiation.
- Specific Hazard** : OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.



HMIS III Rating

- Health** : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability** : 0 Minimal Hazard
- Physical** : 3 Serious Hazard

Party Responsible for the Preparation of This Document

CF Industries, Corporate EHS Department, 847-405-2400

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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