# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **AMMONIUM NITRATE, COATED, PRILLED**

**Other means of identification**

**Product code** 1080

**Recommended use** Not available.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**


**Company name** GFS Chemicals, Inc.

**Address** P.O. Box 245
Powell
OH
43065
US

**Telephone** Phone 740-881-5501
Toll Free 800-858-9682
Fax 740-881-5989

**Website** www.gfschemicals.com

**E-mail** service@gfschemicals.com


**Emergency phone number** Emergency Assistance Chemtrec 800-424-9300

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Oxidizing solids | Category 3 |
| **Health hazards** | Serious eye damage/eye irritation | Category 2A |
| | Specific target organ toxicity, single exposure | Category 2 (blood) |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |

**OSHA hazard(s)** Not classified.

**Label elements**

**Signal word** Warning

**Hazard statement** May intensify fire; oxidizer. Causes serious eye irritation. May cause respiratory irritation. May cause damage to organs (blood).

**Precautionary statement**

**Prevention** Keep/Store away from clothing and other combustible materials. Keep away from heat. Use only outdoors or in a well-ventilated area. Take any precaution to avoid mixing with combustibles. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/eye protection/face protection.

**Response** If inhaled: Remove person to fresh air and keep comfortable for breathing. 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 advice/attention. In case of fire: Use appropriate media for extinction.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of contents/container to an approved waste disposal plant.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

**Substances**

| Hazardous components<br>Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| AMMONIUM NITRATE | | 6484-52-2 | >95 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact** Wash off with soap and water.

**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion** If ingestion of a large amount does occur, call a poison control center immediately.

**Most important symptoms/effects, acute and delayed** Irritation of eyes and mucous membranes.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

**Suitable extinguishing media** Water.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** May intensify fire; oxidizer.

**Special protective equipment and precautions for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire-fighting equipment/instructions** Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

**Specific methods** Cool containers exposed to flames with water until well after the fire is out.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Wear appropriate personal protective equipment.

**Methods and materials for containment and cleaning up** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not get water inside containers. Eliminate ignition sources including sources of electrical, static or frictional sparks. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Prevent entry into waterways, sewers, basements or confined areas.

Large Spills: Stop leak if you can do so without risk. Use clean non-sparking tools to collect absorbed material. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean contaminated surface thoroughly. Sweep up or gather material and place in appropriate container for disposal. After removal flush contaminated area thoroughly with water. This material and its container must be disposed of as hazardous waste. Avoid dust formation. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations. Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills: For waste disposal, see section 13 of the MSDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

## 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling** | Take any precaution to avoid mixing with combustibles. Keep away from heat. Avoid contact with eyes. Wash hands thoroughly after handling. Avoid release to the environment. |
| **Conditions for safe storage, including any incompatibilities** | Keep away from heat. Keep container tightly closed. Do not store near combustible materials. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight. |

## 8. Exposure controls/personal protection

| | |
|---|---|
| **Occupational exposure limits** | No exposure limits noted for ingredient(s). |
| **Biological limit values** | No biological exposure limits noted for the ingredient(s). |
| **Appropriate engineering controls** | Provide eyewash station. |
| **Individual protection measures, such as personal protective equipment** | |
| **Eye/face protection** | Wear eye/face protection. |
| **Skin protection** | |
| **Hand protection** | Wear protective gloves. |
| **Other** | Wear suitable protective clothing. Wear protective gloves. |
| **Respiratory protection** | Respirator must be worn if exposed to dust. In case of insufficient ventilation, wear suitable respiratory equipment. |
| **Thermal hazards** | Not available. |
| **General hygiene considerations** | Do not breathe dust. Avoid contact with eyes. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Appearance** | Crystalline. Granular. |
| **Physical state** | Solid. |
| **Form** | Solid. |
| **Color** | Colorless. White. |
| **Odor** | Odorless. |
| **Odor threshold** | Not available. |
| **pH** | 5.4 (0.1 molar aqueous solution) |
| **Melting point/freezing point** | 337.5 °F (169.7 °C) |
| **Initial boiling point and boiling range** | 392 - 500 °F (200 - 260 °C) |
| **Flash point** | Not flammable |
| **Evaporation rate** | Not available. |
| **Flammability (solid, gas)** | Not applicable. |
| **Upper/lower flammability or explosive limits** | |
| **Flammability limit - lower (%)** | Not available. |
| **Flammability limit - upper (%)** | Not available. |
| **Explosive limit - lower (%)** | Not available. |
| **Explosive limit - upper (%)** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | Very soluble |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | 410 °F (210 °C) Evolves nitrous oxide.<br>When heated to decomp emits highly toxic fumes of nitrogen oxides. |
| **Viscosity** | Not available. |

**Other information**

| | |
|---|---|
| **Density** | 1.72 g/cm3 estimated |
| **Molecular formula** | NH4NO3 |
| **Molecular weight** | 80.06 g/mol |
| **Specific gravity** | 1.725 at 25 °C |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | Not available. |
| **Chemical stability** | Risk of ignition. Stable, however, may decompose if heated. |
| **Possibility of hazardous reactions** | Hazardous polymerization does not occur. |
| **Conditions to avoid** | Excessive heat. |
| **Incompatible materials** | Reducing agents, Flammable materials. |
| **Hazardous decomposition products** | Nitrogen oxides (NOx). |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Ingestion** | Not available. |
| **Inhalation** | May cause irritation to the respiratory system. |
| **Skin contact** | Due to lack of data the classification is not possible. |
| **Eye contact** | Causes serious eye irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Not available. |

**Information on toxicological effects**

**Acute toxicity**

| Product | Species | Test Results |
|---|---|---|
| AMMONIUM NITRATE (CAS 6484-52-2) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | > 88.8 mg/l, 4 Hours |
| *Oral* | | |
| LD50 | Rat | 4500 mg/kg |
| | | 2217 mg/kg |

* Estimates for product may be based on additional component data not shown.

| | |
|---|---|
| **Skin corrosion/irritation** | Based on available data, the classification criteria are not met. |
| **Serious eye damage/eye irritation** | Causes serious eye irritation. |
| **Respiratory sensitization** | Due to lack of data the classification is not possible. |
| **Skin sensitization** | Due to lack of data the classification is not possible. |
| **Germ cell mutagenicity** | Due to lack of data the classification is not possible. |
| **Carcinogenicity** | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| **Reproductive toxicity** | Due to lack of data the classification is not possible. |
| **Specific target organ toxicity - single exposure** | Respiratory tract irritation. May cause damage to organs (blood). |
| **Specific target organ toxicity - repeated exposure** | Due to lack of data the classification is not possible. |
| **Aspiration hazard** | Due to lack of data the classification is not possible. |

## 12. Ecological information

| | |
|---|---|
| **Ecotoxicity** | Contains a substance which causes risk of hazardous effects to the environment. |

| Product | | Species | Test Results |
|---|---|---|---|
| AMMONIUM NITRATE (CAS 6484-52-2) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Carp (Cyprinus carpio) | 65 - 85 mg/l, 48 hours |
| | | | 61 - 104 mg/l, 48 hours |

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** Not available.

**Mobility in soil** Not available.

**Other adverse effects** Not available.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Not available.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT**

**UN number** UN1942

**UN 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

**Transport hazard class(es)** 5.1

**Subsidary class(es)** Not available.

**Packing group** III

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Labels required** 5.1

**Special provisions** A1, A29, IB8, IP3, T1, TP33

**Packaging exceptions** 152

**Packaging non bulk** 213

**Packaging bulk** 240

**IATA**

**UN number** UN1942

**UN 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

**Transport hazard class(es)** 5.1

**Subsidary class(es)** -

**Packaging group** III

**Environmental hazards** No

**Labels required** 5.1

**ERG Code** Not available.

**Special precautions for user** Not available.

**IMDG**

**UN number** UN1942

**UN 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

**Transport hazard class(es)** 5.1

**Subsidary class(es)** -

**Packaging group** III

**Environmental hazards**

**Marine pollutant** No

| | |
|---|---|
| **Labels required** | 5.1 |
| **EmS** | Not available. |
| **Special precautions for user** | Not available. |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available.

**DOT**

**IATA; IMDG**

## 15. Regulatory information

**US federal regulations** CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not on regulatory list.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard categories** | Immediate Hazard - Yes<br>Delayed Hazard - Yes<br>Fire Hazard - Yes<br>Pressure Hazard - No<br>Reactivity Hazard - No |
| **SARA 302 Extremely hazardous substance** | No |
| **SARA 311/312 Hazardous chemical** | No |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Not listed.

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Not regulated.

**DEA Exempt Chemical Mixtures Code Number**

Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**US. Massachusetts RTK - Substance List**

AMMONIUM NITRATE (CAS 6484-52-2)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

AMMONIUM NITRATE (CAS 6484-52-2)

**US. Rhode Island RTK**

AMMONIUM NITRATE (CAS 6484-52-2)

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

## 16. Other information, including date of preparation or last revision

**Issue date** February-20-2013

**Version #** 01

**Further information** Not available.

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information** Product and Company Identification: Product Codes
Composition / Information on Ingredients: Disclosure Overrides