Ammonium Nitrate
Safety Data Sheet

1. Product and Company

Product name: Ammonium Nitrate

Synonym: Ammonium Saltpeter, Ammonium Salt of Nitric Acid

CAS-No.: 6484-52-2

Company: Hummel Croton Inc.
10 Harmich Rd.
South Plainfield, NJ 07080

Telephone: 908-754-1800
Fax: 908-754-1815

Emergency telephone number

Emergency Phone #: Chemtrec US: 800-424-9300
ChemTel International: +1-813-248-0585

2. Hazards

GHS Classification
Oxidizing solids (Category 3), H272
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements

Pictogram(s)

Signal word WARNING
Hazard statement(s)

H272  May intensify fire; oxidizer.
H315  Causes skin irritation.
H319  Causes serious eye irritation.
H335  May cause respiratory irritation.

Precautionary statement(s)

P210  Keep away from heat.
P220  Keep/Store away from clothing/combustible materials.
P221  Take any precaution to avoid mixing with combustibles.
P261  Avoid breathing dust/fume/gas/mist/vapours/spray.
P264  Wash skin thoroughly after handling.
P271  Use only outdoors or in a well-ventilated area.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352  IF ON SKIN: Wash with plenty of soap and water.
P304 + P340  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312  Call a POISON CENTER or doctor/physician if you feel unwell.
P321  Specific treatment (see supplemental first aid instructions on this label).
P332 + P313  If skin irritation occurs: Get medical advice/attention.
P337 + P313  If eye irritation persists: Get medical advice/attention.
P362  Take off contaminated clothing and wash before reuse.
P370 + P378  In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233  Store in a well-ventilated place. Keep container tightly closed.
P405  Store locked up.
P501  Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

None.

3. Composition/Ingredients

<table>
<thead>
<tr>
<th>Substance</th>
<th>Formula</th>
<th>Molecular weight</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Nitrate</td>
<td>NH$_4$NO$_3$</td>
<td>80.05 g/mol</td>
<td>6484-52-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS</th>
<th>%</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Nitrate</td>
<td>6484-52-2</td>
<td>99-100%</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

4. First Aid
First Aid For Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

First Aid For Skin: In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

First Aid For Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

First Aid For Ingestion: If swallowed, call a physician immediately.

5. Fire Data

Flammability: Non-Flammable
Flash Point: Not Applicable
Auto Ignition: Not Applicable
Flammable Limits: Not Applicable
Extinguishing Media: Water spray
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. OXIDIZER. May explode when heated.
Fire/Explosion Hazards: Contact with other material may cause fire. Emits toxic fumes under fire conditions. Container explosion may occur under fire conditions.

6. Accidental Release

Spill Or Leak Procedures: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water.

7. Handling And Storage

Storage Temperatures: Store at ambient temperature
Shelf Life: Unlimited in tightly sealed container
Special Sensitivity: Ammonium nitrate decomposes at about 210°C. The presence of impurities markedly lowers the decomposition temperature, e.g. chloride salts, metal oxides. The following powdered metals react violently or explosively with fused ammonium nitrate below 200°C: aluminum, antimony, bismuth, cadmium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, sodium, nickel, tin, zinc, titanium, as well as brass and stainless steel. Ignites or reacts on contact with: phosphorous, urea, sulfur, potassium nitrite, sawdust, sugar, trinitroanisole, charcoal, cyanoguanidine, potassium permanganate, acetic acid, acetic anhydride. Hot aqueous solutions of ammonium nitrate above 50% concentration may decompose explosively under adiabatic conditions and confinement.
Handling/Storage Precautions: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials. Reseal containers immediately after use. Store away from food and beverages.

8. Exposure Controls/Personal Protection

Eye Protection: Safety glasses or goggles.
Skin Protection: PVC gloves with impervious boots, apron or coveralls. Wash hands and face before eating, drinking or using tobacco.
Respirator: Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.
Ventilation: Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.
Additional Measures: Emergency showers and eye wash stations should be available. Educate and train employees in the safe handling of hazardous chemicals.

9. Physical And Chemical Properties

Physical Form: Solid Crystals or Prills
Color: White
Odor: Odorless
Molecular Weight: 80.05
Boiling Point: Decomposes at 210°C
Melting/Freezing Point: Decomposes at 210°C
Solubility In Water: 2 grams per mL water
Specific Gravity: 1.72

10. Stability And Reactivity

Stability: Stable.
Hazardous Polymerization: Will not occur.
Incompatibilities: Strong reducing agents, strong acids, finely powdered metals.
Instable Conditions: Excessive temperatures (see incompatibilities).
Decomposition Temperature: Decomposes at 210°C
Decomposition Products: Oxides of Nitrogen and Ammonia

11. Toxicological Information

RTECS Number: BR 9050000
Routes Of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.
Toxicity Data: LD50: Oral-Rat 2217 mg/kg
Chronic Toxic Effects: This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.
Acute Toxic Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

12. Ecological Information

Ecotoxicity: Not available at this time.

13. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental regulations.

14. Transportation Information
Proper Shipping Name: Ammonium Nitrate
UN Number: 1942
Class: 5.1
P.G.: III
Label Code: 5.1

15. Regulatory Information

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
TSCA Chemical Inventory: This compound is on the EPA Toxic Substance Control Act (TSCA) Inventory List
California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances, which the State of California has found to cause cancer, birth defects or other reproductive effects.
SARA 313 Title III:
  Section 320 Extremely Hazardous Substances: None
  Section 311/312 Hazardous Categories: None
  Section 313 Toxic Chemicals: None

16. Other Information

Prepared By: Michael Richard
Date: March 20, 2018
Reason For Issue: Emergency Contact Update

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