

# Material Safety Data Sheet



Makes it better®

**Product Code Numbers: 715, 716, 718, 718-b, 31259, 31246, 31246-b, 31359, 31346, 91640**

**Issue Date:** November 2010

Rapid Aid Corp.  
4120A Sladeview Crescent  
Mississauga, ON,  
Canada L5L 5Z3  
T 905.820.4788  
1.800.COLD.HOT (265.3468)  
F 905.820.9226  
www.rapidaid.com

## Calcium Ammonium Nitrate

Conforms to ISO 11014-1 and 91/155/EC

### 1. Chemical Product and Company Identification

**Chemical product name:** Calcium ammonium nitrate

**Common chemical name:**

**Synonyms:** CAN/Nutramon

**Supplier's name:**

**Supplier's address:**

### 2. Composition/Information on Ingredients

Name	CAS number	% by weight	Symbol	R phrases
Ammonium Nitrate	6484-52-2	max. 78	-	-

#### Additional Information

##### Contains:

Name	CAS number
Magnesium Nitrate	13446-18-9
Dolomite	16389-88-1

### 3. Hazards Identification

**Physical/chemical hazards:**

**Environmental hazards:** Harmful to aquatic organisms.

**Effect(s) of (over) exposure:** Slightly irritating to eyes, skin or respiratory tract.

**Symptom(s) of (over) exposure:**

**Inhalation:** Shortness of breath, cough, irritating to respiratory tract.

**Ingestion:** Sore throat, abdominal pain, nausea and vomiting if more than 10 gram is ingested.

**Skin contact:** Redness, tender skin.

**Eye contact:** Redness, pain.

### 4. First Aid Measures

**Ingestion:** Rinse mouth with plenty of water. Make victim drink plenty of water. Do not induce vomiting. Get medical attention if more than 10 gram has been swallowed

**Inhalation:** Remove victim to fresh air. Prevent exertion of affected person. Get medical attention.

**Skin Contact:** Wash with water.

**Eye Contact:** Immediately wash out with plenty of water. Get medical attention.

## 5. Fire Fighting Measures

**Extinguishing media suitable:** Water

**Unusual fire and explosion hazards:** Toxic fumes of oxides of nitrogen may be formed in fire.

**Hazardous thermal decomposition**

**and combustion products:** Toxic fumes of oxides of nitrogen

**Protection of fire-fighters:** Self contained breathing equipment.

## 6. Accidental Release Measures

**Personal precautions:** Use appropriate protective clothing and equipment (see section 8).

**Environmental precautions:** The substance is biodegradable. Harmful to aquatic organisms.

**Methods for cleaning up:** Spilled material should be collected appropriately and wash remainder with plenty of water. If spilled material enters a water course inform the local water authority.

## 7. Handling and Storage

**Handling:** Use appropriate protective clothing and equipment (see section 8)

**Storage:** Store away from combustible material and reducing agents. Do not expose to high temperatures.

**Packaging materials:** Bulk, bags.

## 8. Exposure Controls/Personal Protection

**Engineering measures:** Local exhaust, ventilation.

**Hygienic measures:** When using do not eat, drink or smoke.

**Personal protection:**

**Respiratory system:** Respiratory protection. (dust mask, type P2)

**Skin and body:** Protective clothing.

**Hands:** Protective gloves.

**Eyes:** Safety goggles.

## 9. Physical and Chemical Properties

**Appearance:** Granules, dry.

**Colour:** Brownish.

**Odor:** Odorless.

**Molecular weight:** Not applicable.

**Boiling Point:** Not applicable.

**Melting Point:** Approximately 169°C

**Decomposition temperature:** > 220°C

**Bulk density:** 1000 - 1100 kg/m<sup>3</sup>

**Solubility:** 3,6 ± 0,2 mm.

**Solubility in water:** 190 g/100 ml (20°C).

**Flash point:** None.

**Auto ignition temperature:** Not applicable.

**Lower explosion limit:** Not applicable.

**Upper explosion limit:** Not applicable.

**Freezing point:** Not applicable.

## 10. Stability and Reactivity

**Stability:** Stable.

**Conditions to avoid:** Melts and decomposes when strongly heated.

**Materials to avoid:** Strong base, strong acid, organic materials, chromates, zinc, compounds by copper, nickel and cobalt.

**Hazardous decomposition products:** Calcium ammonium nitrate melts and decomposes when strongly heated, releasing toxic fumes (NO<sub>x</sub>).

**Hazardous polymerization:** Will not occur.

## 11. Toxicological Information

**Chemical name:** Ammonium nitrate.

**Acute toxicity:**

**Oral:** LD50 rat: 2300 mg/kg.

**Dermal:** LD50 rat: expected > 2000 mg/kg.

**Inhalation:** 4 hrs LC50 rat: > 88 mg/l.

**Eye irritation:** Slight eye irritation.

**Skin irritation:** Very slight skin irritation.

**Sensitization:** No skin sensitization.

**Chronic toxicity:** Substance might lead to change in blood structure (formation of methaemoglobine).

**Carcinogenicity:** NTP: No NCI-lifetime study has been carried out

IARC: No IARC-monograph has been published.

OSHA: Not regulated as a carcinogen.

**Mutagenicity:** No mutagenicity expected.

**Reproductive toxicity:** No reproductive toxicity expected.

**Epidemiological data:** Epidemiological data indicate no effects in workers exposed to 10 mg/m<sup>3</sup> for a year or longer

## 12. Ecological Information

**Chemical name:** Ammonium nitrate.

**Mobility:** Highly water soluble. It is not absorbed by soil.

**Persistence and degradability:** Readily biodegradable.

**Bioaccumulative potential:** Log P < 0. Therefore no bioaccumulation potential.

**Ecotoxicity:** 96 h LC50 (for fish): 10 - 100 mg/l.

48 h EC50 (for Daphnia): 10 - 100 mg/l.

## 13. Disposal Considerations

**Responsibility of the receiver to have knowledge of national and local regulations.**

**Methods of disposal:** The substance is biodegradable.

Disposal according to the local legislation.

## 14. Transport Information

**Proper shipping name:** Ammonium nitrate fertilizers.

**UN number:**

**Road/Railway/Inland:** No specific regulations applicable.

**Waterways:** No specific regulations applicable.

**Sea:** No specific regulations applicable.

**Air:**

## 15. Regulatory Information

**Responsibility of the receiver to have knowledge of national and local regulations.**

**EC Classification:**

**Label name:** Not classified as a dangerous substance according to EC criteria.

**Hazard symbol:** None.

**Risk phrases:** None.

**Safety phrases:** None.

**National regulations:** Readily biodegradable.

**WGK (Germany):** 1 (DSM classification)..

**Listed on TSCA-inventory:** Yes (ingredients).

**Listed on DSL-inventory:** Yes (ingredients).

**Listed on AICS-inventory:** Yes (ingredients).

**Listed on MITI-inventory:** Yes (ingredients).

## 16. Other Information

All information given by or on behalf of DSM as to properties, specifications, use, etc. of the products is based on research, including literature and is believed reliable. DSM can however, not assume any responsibility therefore nor for performance nor for results obtained through the use of the products or information involved, nor for any damages that may be caused by or to the products or information.

In this respect the buyer is obliged to check the quality and all other properties of the products. The buyer assumes all responsibilities connected with the use of the products and information.

No liability is assumed for infringement of trademarks, patents or any other rights owned or controlled by third parties by reason of your manufacture, formulation, use or sale of the products and information.