

# Material Safety Data Sheet

# Calcium Ammonium Nitrate

# SECTION 1 - CHEMICAL PRODUCT AND COMPANY IENTIFICATION

Chemical product name: Calcium ammonium nitrate
Common chemical name: Synonyms: CAN/Nutramon
Company information: Choice Chemicals Ltd.

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Changsha, Hunan 410011, P.R. China

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**24 hr Emergency number**: 0086 13298652316

# SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

# 2. Composition/Information on Ingredients

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

#### **SECTION 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.

#### **SECTION 4 - HAZARDS IDENTIFICATION**

**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.

# **SECTION 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.

# **SECTION 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.

# **SECTION 7 - HANDING 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.

# **SECTION 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.

# **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Granules, dry.

Colour: White Odorless.

Molecular weight: Not applicable.

Boiling Point: Not applicable.

Melting Point: Approximately 169°C

**Decomposition temperature:** > 220°C

**Bulk density:** 1000 - 1100 kg/m3 **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.

# **SECTION 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 (NOx).

Hazardous polymerization: Will not occur.

# **SECTION 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/m3 for a year or longer

# **SECTION 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.

# SECTION 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.

# **SECTION 14 - TRANSPORT INFORMATION**

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

**UN number:** none.

Road/Railway/Inland: No specific regulations applicable.
Waterways: No specific regulations applicable.
Sea: No specific regulations applicable.
Air: No specific regulations applicable.

#### **SECTION 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 (ChoiceChem 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).

# **SECTION 16 - OTHER INFORMATION**

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