

# Ammonium Carbonate

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Ammonium Carbonate  
Product form : Mixture

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Food industry: component

#### 1.3. Details of the supplier of the safety data sheet

OliveNation LLC  
50 Terminal Street  
Bldg. 2, Ste. 712  
Charlestown, MA 02129

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: Within USA and Canada: 1.800.424.9300 Outside USA and Canada: +1 703 527 3887

### SECTION 2 : Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Acute Toxicity 4 (oral)  
Eye Damage/Irritation 2A  
Aquatic Acute 3

#### 2.2. Label elements

GHS label elements: The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms :



Signal word :

Warning

Hazard statement :

H319 Causes serious eye irritation  
H302 Harmful if swallowed  
H402 Harmful to aquatic life

Precautionary statement :

P280 Wear protective gloves / eye protection / face protection  
P273 Avoid release to the environment  
P270 Do not eat, drink or smoke when using this product  
P264 Wash with water and soap thoroughly after handling  
P312 Call a poison control or doctor/physician if you feel unwell  
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301/330 If swallowed, rinse mouth  
P337/311 If eye irritation persists: Call a poison center or doctor/physician  
P501 Dispose of contents/container to hazardous or special waste collection point

Emergency overview warning :

Causes eye irritation  
Avoid contact with the skin, eyes and clothing  
Avoid inhalation of dusts  
Use with local exhaust ventilation  
Wear a NIOSH-certified (or equivalent) particulate respirator  
Wear NIOSH-certified chemical goggles

Wear chemical resistant protective gloves  
Wear protective clothing  
Eye wash fountains and safety showers must be easily accessible

## SECTION 3: Composition/information on ingredients :

*Substances* : 50% Ammonium Carbamate 50% Ammonium Hydrogencarbonate

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General advice : Remove contaminated clothing.  
First-aid measures after inhalation : Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention is required.  
First-aid measures after skin contact : Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.  
First-aid measures after eye contact : In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.  
First-aid measures after ingestion : Rinse mouth and then drink plenty of water. Induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

### 4.2. Most Important Symptoms and Effects, both Acute and Delayed

Symptoms : Overexposure may cause: vomiting, shortness of breath, nausea and coughing.

### 4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

(Note to Physician) Treatment : After inhalation of decomposing products: Pulmonary oedema prophylaxis. Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary oedema.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, carbon dioxide, foam

### 5.2. Special hazards arising from the chemical

Hazards during fire-fighting : Ammonia, carbon dioxide. The substances/groups of substances mentioned can be released in case of fire.

### 5.3. Advice for firefighters

Protective equipment for fire-fighting : Fire-fighters should be equipped with self-contained breathing apparatus and turn-out gear.

### 5.4. Further information

Product itself is non-combustible; fire extinguishing method of surrounding area must be considered.

## SECTION 6: Accidental release measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedure

Breathing protection required. Ensure suitable air extract/ventilation during cleaning/emptying of process machinery.

### 6.2. Environmental precautions

This product is regulated by CERCLA ('Superfund').

### 6.3. Methods and materials for containment and cleaning up

For small amounts: sweep/shovel up. For large amounts: sweep/shovel up. Spills should be contained and placed in suitable containers for disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Breathing must be protected when large quantities are decanted without local exhaust ventilation. Processing machines must be fitted with local exhaust ventilation. Avoid dust formation.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage	: Segregate from nitrites and alkaline substances. Do not store with: Sodium Nitrate, Sodium Nitrite. Keep container tightly closed and dry; store in a cool place.
Storage stability	: Protect against moisture. Protect from temperatures above 86°F Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## SECTION 8: Exposure controls/personal protection

Eye/Face protection	: Safety goggles with side-shields. Tightly fitting safety goggles (chemical goggles).
Skin protection	: Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.
Hygiene measures	: Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. Avoid inhalation of dust. Employees should shower at the end of the shift. Wash soiled clothing immediately.
Respiratory protection	: Wear a NIOSH-certified (or equivalent) particulate respirator.
Hand protection	: Chemical resistant protective gloves.
Appropriate Engineering Controls	: Provide local exhaust ventilation to control dust.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Powder, crystalline
Color	: White
Odor	: Ammonia-like
pH	: 9
Evaporation rate	: N/A
Melting point/range	: N/A
Boiling point	: N/A
Flash point	: N/A
Auto-ignition temperature	: N/A
Vapor pressure	: 69 mbar (20°C) 188 mbar (30°C)
Relative density	: 1.6 (20°C)
Bulk density	: 780-830 kg/m <sup>3</sup>
Auto-ignition	: The substance/product decomposes, therefore not determined
Water solubility	: 320 g/l (20°C)
Self-ignition temperature	: Not self-igniting
Thermal decomposition	: >59 °C To avoid thermal decomposition, do not overheat

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No corrosive effect on metal

### 10.2. Chemical stability

The product is chemically unstable

### 10.3. Possibility of hazardous reactions

The product is chemically unstable

### 10.4. Conditions to avoid

Avoid extreme heat

## 10.5. Incompatible materials

Strong alkalines, nitrites

## 10.6. Hazardous decomposition products

Carbon dioxide and ammonia

Thermal decomposition : >59°C To avoid thermal decomposition, do not overheat.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Route of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity	
Assessment of acute toxicity	Of moderate toxicity after single ingestion
LD50 - Oral	>1,800 - <2,150 mg/kg (BASF-Test) Species: rat
LD50 – Dermal	>2,000 mg/kg Species: rat No mortality was observed

Skin corrosion/irritation	: Not irritating to the skin.
Serious eye damage/irritation	: Causes irritation. May cause severe damage to the eyes.
Respiratory or skin sensitization	: Non-irritant
Carcinogenicity	: The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Reproductive toxicity	: Study scientifically not justified
Specific target organ toxicity (repeated exposure)	: Overexposure may cause; vomiting, shortness of breath, nausea, coughing

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water	: Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from the properties of the individual components.
Toxicity to Fish	: LC50 (96 h) 61 mg/l, Oncorhynchus mykiss (Flow through.) Literature data.
Aquatic invertebrates	: EC50 (48 h) 63.7 mg/l, Daphnia magna (OECD Guideline 202, part 1, static) Nominal concentration.
Aquatic plants	: EC50 (72h) 75.9 mg/l (biomass), Desmodemus subspicatus (DIN 38412 Part9, static)

### 12.2. Microroganisms/Effect on Activated Sludge

Toxicity to microorganisms	: OECD Guideline 209 Aquatic Activated Sludge, domestic, non-adapted/EC20 (0.5 h): 1,000 mg/l
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### 12.3. Persistence and degradability

Assessment biodegradation and elimination (h2O)	: Inorganic product which cannot be eliminated from water by biological purification processes. Can be oxidized to nitrate, or can be reduced to nitrogen, by microorganisms.
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### 12.4. Bioaccumulative Potential

Accumulation in organisms is not to be expected.

### 12.5. Mobility in Soil

Absorption to solid soil phase is not expected.

### 12.6. Other Ecological Advice

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Dispose of in accordance with national, state and local regulations. Do not discharge into waterways or sewer systems without proper authorization. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in a licensed facility.

## SECTION 14: Transport information

USDOT: Not classified as a dangerous good under transport regulations.

IMDG: Not classified as a dangerous good under transport regulations.

IATA/ICAO: Not classified as a dangerous good under transport regulations.

FURTHER INFORMATION: Specific national features of transport regulations must be observed. They are to be found in the shipping documents.

## SECTION 15 : Regulatory information

### Federal Regulations

Registration Status:

Chemical	TSCA, US	Released / Listed
Food	TSCA, US	Released / Exempt

**EPCRA 311/312 (Hazard Categories):** Acute;

<b>CERCLA RQ</b>	<b>Chemical Name</b>
5000Lbs	Ammonium Hydrogencarbonate; Ammonium Carbamate

**Reportable Quantity of Release:** 5,000 lb

### State Regulations

<b>State RTK</b>	<b>Chemical Name</b>
MA, NJ, PA	Ammonium Hydrogencarbonate
MA, NJ, PA	Ammonium Carbamate

### **NFPA Hazard Codes:**

Health: 2 Fire: 0 Reactivity: 0 Special:

### **HMIS III Rating:**

Health: 2 Flammability: 0 Physical Hazard: 0

### **Assessment of the Hazard Classes According to UN GHS Criteria (Most Recent Version):**

Eye Dam./Irrit. 2A Serious eye damage/eye irritation

## SECTION 16: Other information

Other information

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