# **Material Safety Data Sheet**

Version 5.1 Revision Date 12/04/2013 Print Date 03/20/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Ammonium Carbonate

Product Number : 379999
Brand : Sigma-Aldrich

Supplier : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # (For : (314) 776-6555

both supplier and

manufacturer)
Preparation Information

ation : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

#### 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

**OSHA Hazards** 

Harmful by ingestion.

**GHS Classification** 

Acute toxicity, Oral (Category 4)
Acute aquatic toxicity (Category 3)

### GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed. H402 Harmful to aquatic life.

Precautionary none

statement(s)

**HMIS Classification** 

Health hazard: 1
Flammability: 0
Physical hazards: 0

**NFPA** Rating

Health hazard: 1 Fire: 0 Reactivity Hazard: 0

### **Potential Health Effects**

InhalationMay be harmful if inhaled. May cause respiratory tract irritation.SkinHarmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Hartshorn salt

Formula :  $CH_8N_2O_3$ Molecular Weight : 96.09 g/mol

Component	Concentration	
Ammonium carbonate		
CAS-No.	506-87-6	<= 100 %
EC-No.	208-058-0	

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIREFIGHTING MEASURES

## Conditions of flammability

Not flammable or combustible.

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

## **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

### **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

## Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form solid

Colour colourless

Safety data

pH no data available

Melting point/range: 58 °C (136 °F)

point/freezing point

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Auto-ignition no data available

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#### temperature

Lower explosion limit no data available Upper explosion limit no data available Vapour pressure no data available Density no data available Water solubility no data available Partition coefficient: log Pow: 0.184

n-octanol/water

Relative vapour

no data available

density

Odour no data available Odour Threshold no data available Evapouration rate no data available

### 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions.

## Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

#### Materials to avoid

Strong acids

## **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

### Oral LD50

no data available

#### Inhalation LC50

no data available

#### **Dermal LD50**

no data available

#### Other information on acute toxicity

LD50 Intravenous - mouse - 96 mg/kg

Remarks: Lungs, Thorax, or Respiration:Respiratory stimulation. Behavioral:Convulsions or effect on seizure threshold.

## Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitisation

no data available

### Germ cell mutagenicity

no data available

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## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

## **Teratogenicity**

no data available

## Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** Harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Synergistic effects

no data available

#### **Additional Information**

RTECS: BP1925000

#### 12. ECOLOGICAL INFORMATION

#### **Toxicity**

Toxicity to fish LC50 - other fish - 34.7 mg/l - 96 h

## Persistence and degradability

no data available

### Bioaccumulative potential

no data available

#### Mobility in soil

no data available

## PBT and vPvB assessment

no data available

### Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

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#### 13. DISPOSAL CONSIDERATIONS

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Ammonium carbonate)

Reportable Quantity (RQ): 5000 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

#### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Harmful by ingestion.

### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Acute Health Hazard

### **Massachusetts Right To Know Components**

	CAS-No.	<b>Revision Date</b>
Ammonium carbonate	506-87-6	1993-04-24
Pennsylvania Right To Know Components		
,	CAS-No.	<b>Revision Date</b>
Ammonium carbonate	506-87-6	1993-04-24
New Jersey Right To Know Components		
, -	CAS-No.	<b>Revision Date</b>
Ammonium carbonate	506-87-6	1993-04-24

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### 16. OTHER INFORMATION

#### **Further information**

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