Section 1 - Identification

Product Name: Ammonium Carbonate

Product Use: For Commercial Use

RESTRICTIONS on USE

NOT TO BE USED AS A PESTICIDE. THIS PRODUCT IS NOT TO BE USED IN VIOLATION OF ANY PATENTS. CHEM ONE LTD. DISCLAIMS ANY AND ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. IN NO EVENT SHALL CHEM ONE LTD. OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER INCLUDING DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOSS OF BUSINESS PROFITS OR SPECIAL DAMAGES, EVEN IF CHEM ONE LTD. OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OF LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES SO THE FOREGOING LIMITATION MAY NOT APPLY.

Supplier Information
Chem One Ltd.
14140 Westfair East Drive
Houston, Texas 77041-1104
Phone: (713) 896-9966
Fax: (713) 896-7540
Emergency # (800) 424-9300 or +1 (703) 527-3887

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Section 2 – Hazard(s) Identification

GHS HAZARD

2.1 Hazard Classes
Acute toxicity, oral

Hazard Categories
Category 4

2.2 Signal Word: Warning

2.3 Pictograms:

2.4 Hazard Statements

PHYSICAL HAZARDS: None

HEALTH HAZARDS:
H302: Harmful if swallowed

ENVIRONMENTAL HAZARDS: None

PRECAUTIONARY STATEMENTS:
P102: Keep out of reach of children
P202: Do not handle until all safety precautions have been read and understood
P264: Wash hands thoroughly after use
P270: Do not eat, drink or smoke when using this product
Ammonium Carbonate

RESPONSE STATEMENTS: P301+P312+P330: IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell (USA National POISON CENTER 800-222-1222). Rinse mouth.

STORAGE STATEMENTS: None

DISPOSAL STATEMENTS: P501: Dispose of content and/or container in accordance with local, regional, national or international regulations

Hazards not otherwise classified (HNOC): May irritate mucous membranes.

---

Section 3 - Composition / Information on Ingredients

3.1

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>CAS #.</th>
<th>Concentration%</th>
<th>Other Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Carbonate</td>
<td>506-87-6</td>
<td>&gt;99%</td>
<td>Diammonium Carbonate</td>
</tr>
</tbody>
</table>

---

Section 4 - First Aid Measures

4.1 Eye: Contact with the eyes can cause irritation. Symptoms may include discomfort or pain and redness. Severe overexposure can result in swelling of the conjunctiva along with tissue damage.

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation develops and persists.

4.2 Skin: Prolonged and repeated contact can cause defatting and drying of the skin and can lead to irritation and/or dermatitis.

**Skin:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash clothing before reuse.

4.3 Ingestion: Ingestion can cause inebriation, headache, gastrointestinal pain, nausea, and vomiting leading to central nervous system depression. Aspiration of liquid into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonia, pulmonary edema and even death.

**Ingestion:** Do NOT induce vomiting. Get medical aid immediately.

4.4 Inhalation: Dust may cause irritation of the nose, throat, and lungs. Ammonia vapors released upon decomposition may cause irritation of the upper respiratory tract, with coughing, vomiting, and redness to the mucous membranes. Higher concentrations > 1000 ppm may cause restlessness, tightness in the chest, pulmonary edema, weak pulse, and cyanosis.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult and IF TRAINED, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation without protection.

4.5 After first aid, get appropriate paramedic, or community medical support. Note to Physicians: The severity of outcome following ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested. Therefore, there is a need for rapid treatment of any ingestion exposure.

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Section 5 - Fire-Fighting Measures

5.1 Flammable Properties: Not flammable

5.2 Suitable Extinguishing Media: Carbon dioxide, dry chemical powder or appropriate foam. Use water to keep non-leaking, fire-exposed containers cool.
5.3 **Special hazards**: Generation of ammonia gas may be an explosion hazard.

5.4 **Precautions for Firefighters**: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Contact with metals may evolve flammable hydrogen gas.

### Section 6 - Accidental Release Measures

6.1 **Personal Precautions**: Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Increase ventilation to area or move container to a well-ventilated and secure area. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Before entry, especially into confined areas, check atmosphere with an appropriate monitor.

6.2 **Methods for Containment and Clean-up**
Contain the discharged material. If sweeping of a contaminated area is necessary use a dust suppressant agent.

6.3 **Other Information**: Report spills to local health, safety and environmental authorities, as required.

### Section 7 - Handling and Storage

7.1 **Handling**: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not breathe dust. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product.

7.2 **Storage**: Store in a cool, dry, well-ventilated area, out of direct sunlight. Keep quantities stored as small as possible. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.

### Section 8 - Exposure Controls / Personal Protection

8.1 **Control parameters**

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>ACGIH- TLV</th>
<th>OSHA - PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Carbonate</td>
<td>25 ppm TWA</td>
<td>50 ppm TWA</td>
</tr>
</tbody>
</table>

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

**NOTE**: TWA Means "TWA is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded."

8.2 **Appropriate engineering controls**: Provide general or local exhaust ventilation systems to maintain airborne concentrations below TLV/PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.3 **Personal protective equipment**

8.3.1 **Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.3.2 **Hand protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use. Select gloves tested to the ANSI/ISEA 105-2011 Full contact: Nitrile rubber
Splash contact: Nitrile rubber

8.5.3 **Eye protection**
Ammonium Carbonate

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US).

8.5.4 Skin and body protection
Chemical splash 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.

8.9 Protective Clothing Pictograms

---

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless or White solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Strong Odor - Ammonia-Like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>58 deg C (decomposition)</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>CH8N2O3</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>n-octanol/water: Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Negligible</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>58 deg C (decomposition)</td>
</tr>
<tr>
<td>Explosion Limits, Lower</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion Limits, Upper</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.5 @ 20C</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>96.0676</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not flammable</td>
</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

10.1 Chemical Stability: Stable under ordinary conditions of use and storage.

10.2 Conditions to Avoid: May decompose on exposure to air. Incompatible materials, dust generation, exposure to air, excess heat.

10.3 Incompatible Materials: Strong acids.

10.4 Hazardous Decomposition: When heated to decomposition, calcium chloride emits toxic fumes of hydrogen chloride.

10.5 Hazardous Polymerization: Violent polymerization occurs when mixed with Methyl Vinyl Ether.

Section 11- Toxicological Information

11.1 Toxicity Data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 oral rat</th>
<th>LC50 Dermal Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Carbonate</td>
<td>900 mg/kg</td>
<td>None Listed</td>
</tr>
</tbody>
</table>

11.2 Carcinogenicity: No

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>ACGIH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Carbonate</td>
<td>Not Listing</td>
<td>Not Listing</td>
<td>Not listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Created 06/03/2015 SJC 7 of 7 Revised: 06/17/2019
11.3 Key to Abbreviations
IARC = International Agency for Research on Cancer.
ACGIH = American Conference of Governmental Industrial Hygienists
NTP = National Toxicology Program.

11.4 Routes: Inhalation, Ingestion, skin and/or eye contact.

11.5 Target Organs: Lungs, Thorax, or Respiratory track

11.6 Inhalation Dust may cause irritation of the nose, throat, and lungs.

11.7 Ingestion Harmful if swallowed.

11.8 Skin May cause skin irritation.

11.9 Eyes May cause eye irritation.

11.10 Teratogenicity: Not harmful the unborn child

11.11 Reproductive Toxicity: Not a reproductive hazard

11.12 Mutagenicity: Not a mutagen

11.13 Signs and Symptoms of Exposure: Dust may produce irritation of eyes, mouth and respiratory tract. Inhalation of the dust may produce irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Section 12 - Ecological Information

12.1

<table>
<thead>
<tr>
<th>Ammonium Carbonate</th>
<th>LC50 37 mg/l</th>
<th>Fish</th>
<th>96 hours</th>
</tr>
</thead>
</table>

**Toxicity** OECD Guideline 204 Test results found in the European Chemical Agency Data Base show components of this product to cause long-term toxicity to fish.

**Mobility in soil:** No Data available

**Persistence/degradability:** No Data available

**Bioaccumulation:** No Data available

**PBT and vPvB assessment:** No Data available

Section 13 - Disposal Considerations

13.1 Disposal: DO NOT REUSE EMPTY CONTAINER! Container with residues should be considered to be hazardous wastes. Contact a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Section 14 - Transport Information

14.1
Ammonium Carbonate

NOTE: The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under I.M.O., I.C.A.O. (I.A.T.A.) and 49 CFR to assure regulatory compliance.

**US DOT Information**
- **Shipping Name:** Not applicable.
- **Hazard Class:** Not applicable
- **UN/NA #:** Not applicable
- **Packing Group:** Not applicable
- **Required Label(s):** Not applicable
- **RQ Quantity:** Not applicable

For Shipments by Air;
Please refer to the most recent edition of the “International Air Transport Association (IATA)” Regulations

For Shipments by Vessel;
Please refer to the most recent Amendment of the “International Maritime Dangerous Goods (IMDG) Code”

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**Section 15 - Regulatory Information**

15.1 US Regulations:

**TSCA:** All components of this product are on the TSCA Active Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

**CERCLA Hazardous Substances and corresponding RQs** 5000 lbs.

**SARA Community Right-to-Know Program:** None

**Clean Water Act:** None

**Clean Air Act:** None

**OSHA:** All ingredients are listed in 1910.1200

**State Regulations**

**California prop. 65:** None

Chemicals on the following State Right to Know Lists:

**Massachusetts:** All components of this product are on the Massachusetts Inventory or are exempt from Inventory requirements.

**New Jersey** All components of this product are on the New Jersey inventory or are exempt from Inventory requirements.

**Pennsylvania:** All components of this product are on the Pennsylvania Inventory or are exempt from Inventory requirements.

15.2 Canadian Regulation:
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

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**Section 16 - Other Information**

16.1 Disclaimer: The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER NO responsibility is assumed for any damage or injury caused
Ammonium Carbonate

resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above is furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

16.2 References: CHEMpendium data base of Canadian Centre for Occupational Health and Safety (CCOHS), JJ Keller on Line, European Chemical Agency Data Base and MSDS and SDS of chemicals in this mixture.

16.3 SDS Preparation Date: 06/03/2015
Prepared by SJC Compliance Education, Inc.
16516 El Camino Real Suite 417
Houston, TX 77062

06/13/2018 Melanie Koch removed IMDG and IATA specific shipping information and added a refer to latest edition statement. Nothing else was changed during this revision.

06/17/2019 Revised Sections 2, 4, 7, 8 and 9.