

## Ammonium Citrate Dibasic

### Section 1 - Chemical Product and Company Identification

TRADE NAMES : Ammonium Citrate Dibasic

Recommended use : Not available

Restriction of use : Not available

Company Identification

Company : OCI Company Ltd.

Address : 94, Sogong-ro, Jung-gu, Seoul, KOREA

Tel No. : 82 - 2 - 727 - 9494

### Section 2 - Hazards Identification

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|-------------------------------------|---------------|
| 1) Hazard Classification            | Not available |
| 2) Warning signal                   |               |
| Symbol                              | Not available |
| Signal word                         | Not available |
| Hazard statement                    | Not available |
| Prevention precautionary statements | Not available |
| 3) NFPA                             |               |
| Health Rating                       | 1             |
| Flammability Rating                 | 1             |
| Reactivity Rating                   | 0             |

### Section 3 - Composition, Information on Ingredients

COMPONENT: Ammonium Citrate Dibasic

CAS No.: 3012-65-5

PERCENTAGE: 100%

### Section 4 - First Aid Measures

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Ingestion:** Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

**Eye Contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing.

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## Section 5 - Fire Fighting Measures

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**General fire hazards:** Dust may form explosive mixture with air.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Water. Dry chemical. Carbon dioxide

**Unsuitable extinguishing media:**None known.

**Specific hazards arising from the chemical:**During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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## Section 6 - Accidental Release Measures

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**Personal precautions, protective equipment and emergency procedures:** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:** Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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## Section 7 - Handling and Storage

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**Precautions for safe handling:** DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Use only with adequate ventilation. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

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## Section 8 - Exposure Controls, Personal Protection

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### Control parameters

**Occupational exposure limits:**None of the components have assigned exposure limits.

**Appropriate engineering controls:** No data available.

### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye Protection:** Use tight fitting goggles if dust is generated.

**Skin Protection:** Wear protective gloves and clean body-covering clothing.

**Respiratory protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

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## Section 9 - Physical and Chemical Properties

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### Appearance

Physical state: Solid

Form: Granules or powder

Color: White

Odor: Slight ammonia odor

### Solubility

Solubility in water: Soluble

Solubility (other): No data available.

Specific Gravity: No information found.

pH: 4.3 (0.1 molar aqueous solution)

Boiling Point :Not applicable.

Melting Point:: No data available

Vapor Pressure:Estimated < 0.01 kPa (25 °C)

Vapor density: No data available.

Relative density: 1.48 (25 °C)

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Molecular weight: 226.19

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## Section 10 - Stability and Reactivity

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:**Hazardous polymerization does not occur.

**Conditions to Avoid:** Contact with incompatible materials. Heat, sparks, flames.

**Incompatible materials:** Strong oxidizing agents. Caustics.

**Hazardous decomposition products:** Thermal decomposition may produce oxides of carbon and nitrogen. ammonia .

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## Section 11 - Toxicological Information

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### Information on likely routes of exposure

**Ingestion:** May cause irritation of the gastrointestinal tract.

**Inhalation:** May cause irritation to the respiratory system.

**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

### Information on toxicological effects Acute toxicity (list all possible routes of exposure)

**Oral Product:** No data available.

**Dermal Product:** No data available.

**Inhalation Product:** No data available.

**Repeated dose toxicity Product:** No data available.

**Skin corrosion/irritation Product:** Causes skin irritation.

**Serious eye damage/eye irritation Product:** Causes serious eye irritation.

**Respiratory or skin sensitization Product:** Not a skin sensitizer.

**Carcinogenicity Product:** This substance has no evidence of carcinogenic properties.  
**Reproductive toxicity Product:**No components toxic to reproduction  
**Specific target organ toxicity - single exposure Product:** No data available.  
**Specific target organ toxicity - repeated exposure Product:** No data available.  
**Aspiration hazard Product:** Not classified  
**Other effects:** None known.

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## Section 12 - Ecological Information

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### Ecotoxicity:

#### Acute hazards to the aquatic environment:

**Fish Product:** No data available.

**Aquatic invertebrates Product:** No data available.

**Chronic hazards to the aquatic environment:** No data available.

**Fish Product:** No data available.

**Aquatic invertebrates Product:** No data available.

**Toxicity to Aquatic Plants Product:** No data available.

#### Persistence and degradability

**Biodegradation Product:** There are no data on the degradability of this product.

**BOD/COD ratio Product:** No data available.

#### Bioaccumulative potential

**Bioconcentration factor (BCF) Product:** No data available on bioaccumulation.

**Partition coefficient n-octanol / water (log Kow) Product:** No data available.

**Other adverse effects:** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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## Section 13 - Disposal Considerations

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**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

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## Section 14 - Transport Information

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Not regulated.

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## Section 15 - Regulatory Information

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### US federal regulations

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

#### **CERCLA Hazardous Substance List (40 CFR 302.4):**

AMMONIUM CITRATE DIBASIC Reportable quantity: 5000 lbs.

#### **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

AMMONIUM CITRATE DIBASIC Reportable quantity: 5000 lbs.

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

### US state regulations

**US. California Proposition 65:** No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act:**

AMMONIUM CITRATE DIBASIC Listed

**US. Massachusetts RTK - Substance List**

AMMONIUM CITRATE DIBASIC Listed

**US. Pennsylvania RTK - Hazardous Substances**

AMMONIUM CITRATE DIBASIC Listed

**US. Rhode Island RTK:**No ingredient regulated by RI Right-to-Know Law present.

**Inventory Status:**

Australia AICS: On or in compliance with the inventory

Canada DSL Inventory List: On or in compliance with the inventory

EINECS, ELINCS or NLP: On or in compliance with the inventory

Japan (ENCS) List:Not in compliance with the inventory.

China Inv. Existing Chemical Substances: Not in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory

Canada NDSL Inventory: Not in compliance with the inventory.

Canada NDSL Inventory: On or in compliance with the inventory

Philippines PICCS: On or in compliance with the inventory

US TSCA Inventory: On or in compliance with the inventory

New Zealand Inventory of Chemicals: On or in compliance with the inventory

Japan ISHL Listing: On or in compliance with the inventory

Japan Pharmacopoeia Listing: Not in compliance with the inventory.

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**Section 16 - Other Information**

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Sources : KOSHA, National Emergency Management Agency

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