

Ammonium carbonate**11204-6X1KG**

Version 2.0

Revision Date 02/13/2019

Print Date 10/17/2019

SECTION 1. IDENTIFICATION

Product name : Ammonium carbonate

Number : 000000020765

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171

(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414
: Transportation (CHEMTREC): 1-800-424-9300 or
+1-703-527-3887
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : white

Odor : Ammonia stinging

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Classification of the substance or mixture

Classification of the substance or mixture : Acute toxicity, Category 4, Oral
Eye irritation, Category 2A

GHS Label elements, including precautionary statements

Symbol(s) :



Signal word :

Warning

Hazard statements :

Harmful if swallowed.
Causes serious eye irritation.

Precautionary statements :

Prevention:Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ eye protection/ face protection.**Response:**IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Rinse mouth.
If eye irritation persists: Get medical advice/ attention.**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

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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, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Ammonium bicarbonate	1066-33-7	>=25.00 - <=50.00 %
Ammonium carbamate	1111-78-0	>=25.00 - <=50.00 %

SECTION 4. FIRST AID MEASURES

- General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately. Show this safety data sheet to the doctor in attendance.
- Inhalation : Call a physician if irritation develops or persists.
- Skin contact : After contact with skin, wash immediately with plenty of water.
- Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : When swallowed, allow water to be drunk. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

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	Foam Carbon dioxide (CO ₂) Dry powder
Specific hazards during firefighting	: Fire may cause evolution of: Carbon oxides Ammonia nitrogen oxides (NO _x)
Special protective equipment for firefighters	: Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas.
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust. Avoid contact with skin, eyes and clothing.
Environmental precautions	: Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Use mechanical handling equipment. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe	: Wear personal protective equipment.
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handling : Use only in well-ventilated areas.
Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.
Ammonia gas may be liberated at high temperatures.
Avoid flammable gas mixtures.

Storage

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

Further information on storage conditions : The storage temperature should not exceed 50°C.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Engineering measures : Local exhaust

Eye protection : Safety glasses with side-shields

Hand protection : Latex gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Protective suit

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Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures : Keep working clothes separately.
Wash hands before breaks and at the end of workday.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Color : white

Odor : Ammonia stinging

Odor threshold : <5 ppm

pH : 9 at 100.00 g/l, 20 °C

Decomposition temperature : > 59 °C

Boiling point/boiling range : Note: Not applicable

Flash point : Note: Not applicable

Evaporation rate : Note: no data available

Flammability : The product is not flammable.

Lower explosion limit : Note: Not applicable

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Upper explosion limit	: Note: Not applicable
Vapor pressure	: 69 hPa at 20 °C(68 °F)
Vapor density	: Note: no data available
Density	: 0.9 g/cm ³ at 20 °C
Water solubility	: 320 g/l at 20 °C
Partition coefficient: n-octanol/water	: log Pow: -2.4 - -0.47
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Decomposition temperature	: > 59 °C Note: Decomposition temperature
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 96.09 g/mol
Bulk density	: 780 - 830 kg/m ³

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SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous decomposition products formed under fire conditions. Exothermic reaction with strong acids.
Conditions to avoid	: Protect from heat/overheating. Keep away from direct sunlight.
Incompatible materials	: Strong acids Bases Iodine Nitrates
Hazardous decomposition products	: Carbon oxides Ammonia nitrogen oxides (NO _x)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: > 1,800 - < 2,150 mg/kg Species: Rat Method: OECD Test Guideline 401
Acute inhalation toxicity	: Note: no data available
Acute dermal toxicity	: LD50: > 2,000 mg/kg Species: Rat Method: OECD Test Guideline 402

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- Skin irritation : Species: human skin
Result: slight irritation
Method: OECD Test Guideline 439
Note: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.
- Eye irritation : Species: Rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405
- Sensitisation : Mouse local lymph node assay
Result: non-sensitizing
Method: OECD Test Guideline 429
- Repeated dose toxicity : Note: Not classified due to data which are conclusive although insufficient for classification.
- Genotoxicity in vitro : Test Method: In vitro gene mutation study in mammalian cells
Metabolic activation: with and without metabolic activation
Result: negative
Method: OECD Test Guideline 476
Test substance: REACH dossier "read-across"
- Genotoxicity in vivo : Test Method: Chromosome aberration test
Species: Mouse
Method: OECD Test Guideline 474
Test substance: REACH dossier "read-across"
Result: negative

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

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Toxicity to fish : LC50: 37 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates : EC50: 63.7 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae : static test
EC50: 253 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Method: OECD Test Guideline 201

: static test
EC50: 141 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Method: OECD Test Guideline 201

: static test
EC50: 75.9 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
Method: DIN 38412

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology**Ecotoxicology Assessment**

Results of PBT assessment
Not applicable

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

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

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Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information

US. EPA CERCLA Hazardous Substances (40 CFR 302) : The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):

Reportable quantity: 5000 lbs
 : Ammonium bicarbonate 1066-33-7
 : Ammonium carbamate 1111-78-0

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

SARA 313 Components : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Ammonium bicarbonate 1066-33-7
 : Ammonium carbamate 1111-78-0

SARA 311/312 Hazards : Acute Health Hazard

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California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Ammonium bicarbonate 1066-33-7
: Ammonium carbamate 1111-78-0

New Jersey RTK : Ammonium bicarbonate 1066-33-7
: Ammonium carbamate 1111-78-0

Pennsylvania RTK : Ammonium bicarbonate 1066-33-7
: Ammonium carbamate 1111-78-0

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 1	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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