

RM.3-93, TENGFEI BUILDING, NO.88 JIANGMIAO RD., RESEARCH AND INNOVATION PARK,

NANJING ZONE,(JIANGSU) PILOT FREE TRADE ZONE, CHINA

Material Safety Data Sheet

DATE OF ISSUE: 2015.03.20

Section 1 - Chemical Product and Company Identification

MSDS Name: Ammonium Bicarbonate

Other names: Ammonium hydrogen carbonate

Chemical formula: NH4HCO3

Company indentification: EPOCH MASTER GLOBAL BUSINESS (JIANGSU) INC.

Address: RM.3-93, TENGFEI BUILDING, NO.88 JIANGMIAO RD., RESEARCH AND INNOVATION

PARK, NANJING ZONE, (JIANGSU) PILOT FREE TRADE ZONE, CHINA

For information, call: 13770711448

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
1066-33-7	Ammonium Bicarbonate	Cca. 99.5-100

Hazard Symbols: None listed Risk Phrases: None listed

Section 3 - Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.



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Section 4 - First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5 - Fire Fighting Measures

Flammability of the Product: Non-flammable. Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Water, water spray, foam, carbon dioxide (CO2), dry powder.

Special Remarks on Fire Hazards: Aqueous solutions or powders that become wet render surfaces extremely slippery.

Special Remarks on Explosion Hazards: Not available.

Section 6 - Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container.



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Section 7 - Handling and Storage

Precautions: Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9 - Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid.)

Odor: Ammoniacal. (Slight.)

Taste: Not available.

Molecular Weight: 79.06 g/mole

Color: White.

pH (1% soln/water): 7 [Neutral.]
Boiling Point: Not available.
Melting Point: 107.5°C (225.5°F)
Critical Temperature: Not available.
Specific Gravity: 1.59 (Water = 1)
Vapor Pressure: Not applicable.
Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.



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Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility: Soluble in cold water, hot water. Insoluble in methanol.

Section 10 - Stability and Reactivity

Stability: The product is stable. **Instability Temperature:** Not available. **Conditions**

of Instability: Not available.

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass. Special Remarks on Reactivity: Not available. Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11 - Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes and upper

respiratory tract.

Section 12 - Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available. **Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.



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Section 13 - Disposal Considerations

Waste from residues/unused Products: In accordance with local and national regulations.

Contaminated package: Rinse empty containers with water and use rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

Section 14 - Transport Information

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea;

NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

Section 15 - Regulatory Information

Federal and State Regulations: Pennsylvania RTK: Ammonium bicarbonate Massachusetts RTK: Ammonium bicarbonate TSCA 8(b)

inventory: Ammonium bicarbonate

CERCLA: Hazardous substances.: Ammonium bicarbonate

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2 Fire Hazard: 0 Reactivity: 0

Personal Protection: E



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National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0
Reactivity: 0
Specific hazard:
Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16 - Additional Information

MSDS Creation Date: 19/05/2013

Disclaimer:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.