

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Ammonium Bicarbonate
CAS number 1066-33-7
Synonyms Ammonium Hydrogencarbonate

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.
Telephone 512-668-9918
Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC
International 1-352-323-3500 INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity Category 4

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word	Warning
Hazard statements	Harmful if swallowed
Precautionary statements:	
Prevention	Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
Disposal	Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ammonium bicarbonate	Ammonium Hydrogencarbonate	1066-33-7	100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. If not breathing, give artificial respiration. Give medical attention if symptoms occur.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

None reasonable foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Non-combustible. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH/MSHA (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available

Autoignition Temperature No information available

Explosion limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

NFPA

Health	Flammability	Instability	Physical hazards
2	0	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

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

Incompatibilities

Strong acids, alkaline

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

US. ACGIH Threshold Limit Values

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

US. NIOSH: Pocket Guide to Chemical Hazards

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

No information available

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 19 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 19 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Ammonia-like
Odor Threshold	No information available
pH	7.8 (0.1N)
Melting Point/Range	60 °C / 140 °F
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	60 mmHg @ 25 °C
Vapor Density	No information available
Density	1.586
Solubility	Partially soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	NH ₄ HCO ₃
Molecular Weight	79.06
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions, heat sensitive.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Avoid dust formation, incompatible products, temperature above 35 °C

10.5 Incompatible materials

Strong acids, alkaline

10.6 Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂), ammonia

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium bicarbonate (1:1)	1576 mg/kg (rat)	>5000 mg/kg (rabbit)	Not listed

Skin corrosion/irritation

No information available

Serious eye damage/eye irritation

No information available

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
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Ammonium bicarbonate (1:1)	1066-33-7	Not listed	Not listed	Not listed	Not listed	Not listed
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Specific target organ toxicity - single exposure

No information available

Specific target organ toxicity - repeated exposure

No information available

Reproductive toxicity

No information available

Chronic effects

No information available

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Ammonium bicarbonate (1:1)	LC50	Oncorhynchus mykiss (freshwater fish)	63.4 mg/L (96h)
	EC50	Pseudomonas putida (microtox)	1347 mg/L (16h)
	EC50	Water Flea	145.6 mg/L (48h)

12.2 Persistence and degradability

Persistence is unlikely

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

log Pow: -2.4

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Listed (AMMONIUM BICARBONATE (1066-33-7))

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed (AMMONIUM BICARBONATE (1066-33-7)) 5000 lb

SARA 304 Emergency release notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See section 2 for more information

SARA 313 (TRI reporting)

Listed (AMMONIUM BICARBONATE (1066-33-7)) 100% weight, 1.0 threshold value

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

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

Not regulated.

Safe Drinking Water Act

Not regulated

**FEMA Priority Substances Respiratory Health and Safety in the Flavor
Manufacturing Workplace**

Not listed

US state regulations

US. Massachusetts RTK - Substance List

Listed (AMMONIUM BICARBONATE (1066-33-7))

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

Listed (AMMONIUM BICARBONATE (1066-33-7))

US. Pennsylvania Worker and Community Right-to-Know Law

Listed (AMMONIUM BICARBONATE (1066-33-7))

California Proposition 65

Not listed

SECTION 16: Other information

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Revision: 0

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

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