



Material Safety Data Sheet

Ammonium bicarbonate

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Ammonium bicarbonate
Synonym: Ammonium hydrogen carbonate
Brand: Fajrparsian
CAS-No: 1066-33-7
EC-No: 213-911-5
Molecular Formula: NH₄HCO₃

1.2 Details of the supplier of the safety data sheet

Company: Fajrparsian
4/1 Talash, South Talash St., 1th Toos Industrial Town, Mashhad, Khorasan
Razavi, Iran
Telephone: +985135413521
Fax: +985135413522
E-mail: Info@fajrparsian.com

2 Composition and Information on Ingredients

Name: Ammonium bicarbonate
CAS-No: 1066-33-7
% By Weight: >99.5%
Risk Phrases: 22 36/37/38
Hazard Symbols: XN



3 Hazards Identification

3.1 EMERGENCY OVERVIEW

Appearance: colorless to white solid.
Warning! Causes eye, skin, and respiratory tract irritation. May be harmful if swallowed.
Target Organs: Respiratory system, eyes, skin.

3.2 Classification of the substance

CLP Classification – Regulation (EC) No 1272/2008



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3.3 Potential Health Effects

Eye:	Causes eye irritation
Skin:	Causes skin irritation
Ingestion:	May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation:	Causes respiratory tract irritation
Chronic:	No information found

3.4 Environmental hazards

Based on available data, the classification criteria are not met

3.5 Hazard Statements H302 - Harmful if swallowed

3.6 Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P264 - Wash face, hands and any exposed skin thoroughly after hand

4 First Aid Measures

General Advice:	If symptoms persist, call a physician.
Eyes contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin contact:	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion:	Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 capfuls of milk or water. Wash mouth out with water.
Inhalation:	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.
Notes to Physician:	Treat symptomatically and supportively.

5 Firefighting Measures

General Information	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
Extinguishing Media	Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point	Not applicable
Autoignition	Not applicable
Temperature:	
Explosion Limits:	Lower: Not available. Upper: Not available
NFPA Rating:	(estimated) Health: 2; Flammability: 1; Instability: 0



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6 Accidental Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

7 Handling and Storage

- Handling:** Minimize dust generation and accumulation. Avoid breathing dust, mist, or vapor. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.
- Storage:** Store in a cool, dry place. Store in a tightly closed container.
- Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)** Class 13

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.

9 Physical and Chemical Properties

- Physical State** Solid
- Appearance** colorless to white
- Odor** ammonia-like - weak odor
- pH** 7.6-8.1 (5g/100 ml of water)
- Vapor Pressure** 60 mm Hg at 25 deg C
- Vapor Density** Not available.
- Evaporation Rate** Not applicable.
- Viscosity** Not available.



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Boiling Point	Decomposes.
Freezing/Melting Point	Decomposes above 41.9 °C
Solubility	17.4 % at 20°C in water.
Specific Gravity/Density	1.586
Molecular Formula	NH ₄ HCO ₃
Molecular Weight	79.06

10 Stability and Reactivity

Chemical Stability	Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid	Dust generation, excess heat.
Incompatibilities with Other Materials	Strong oxidizing agents, strong acids, alkalis.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, ammonia.
Hazardous Polymerization	Has not been reported.

11 Toxicological Information

CAS	1066-33-7
LD50/LC50	Not available
Carcinogenicity	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology	No information found
Teratogenicity	No information found
Reproductive Effects	No information found
Mutagenicity	No information found
Neurotoxicity	No information found

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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13 Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14 Transport Information

GENERAL

This product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN Number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous good.

IMDG: Not dangerous good.

IATA: Not dangerous good.

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packing group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for the user

According to the transportation rules, it is not classified as dangerous goods and no special precautions are required.

Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

Not classified as dangerous in the meaning of transport regulations.

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture



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International Inventories

X = listed, Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), China (IECSC), Australia (AICS).

Component	EINECS	NLP	ELINCS	TSCA	DSL	NDSL	IECSC	KECL	AICS
Ammonium bicarbonate (1:1)	213-911-5		-	X	X		X	KE-0167 8	X

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

16 Other Information

NFPA Ratings

Health: 1 Flammability: 0 Reactivity: 0

This 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. Such information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.