

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Trade name: AMMONIUM BICARBONATE, FFQ, PURE
CAS number: 1066-33-7
EC number: 213-911-5
REACH number: 01-2119486970-26-XXXX

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

Recommended use: FOOD ADDITIVE
FOR PROFESSIONAL USE
FOR INDUSTRIAL USE

Company name: Nexchem Ltd
Unit 3 Barshaw Park
Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

EC regulation criteria 1272/2008 (CLP): Warning, Acute Tox. 4, Harmful if swallowed.

Adverse physicochemical, human health and environmental effects: No other hazards

Label elements:

Hazard pictograms:



Warning

Hazard statements: H302 Harmful if swallowed.

Precautionary statements: P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
P330 Rinse mouth.

[cont...]

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 2

Special Provisions: None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

Other hazards:

vPvB Substances: None

PBT Substances: None

Other Hazards: No other hazards

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances

Trade name: AMMONIUM BICARBONATE, FFQ, PURE

CAS number: 1066-33-7

EC number: 213-911-5

REACH number: 01-2119486970-26-XXXX

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 90%	AMMONIUM BICARBONATE	CAS: 1066-33-7 EC: 213-911-5 REACH No.: 01-2119486970-26-XXXX	3.1/4/Oral Acute Tox. 4 H302
>= 0.5% - < 1%	MAGNESIUM CARBONATE	CAS: 12125-28-9 EC: 235-192-7	3.1/4/Oral Acute Tox. 4 H302

Mixtures: N.A.

4. FIRST AID MEASURES

Description of first aid measures:

In case of skin contact: Wash thoroughly the body (shower or bath).

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion: Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety data sheet.

Give nothing to eat or drink.

In case of Inhalation: Remove casualty to fresh air and keep warm and at rest.

Most important symptoms and effects, both acute and delayed: None

Indication of any immediate medical attention and special treatment needed:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment: None.

[cont...]

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 3

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Water.
Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons: None in particular.

Special hazards arising from the substance or mixture: Do not inhale explosion and combustion gases.

Advice for firefighters: Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately.
This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

Environmental precautions: Do not allow to enter soil/subsoil. Do not allow to enter surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand.

Methods and material for containment and cleaning up: Wash with plenty of water.

Reference to other sections: See also section 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and feed.

Incompatible materials: Keep away from alkalis, acids, nitrates and nitrites.

Instructions as regards storage premises: Adequately ventilated premises.

Specific end use(s): None in particular.

[cont...]

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 4

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	No occupational exposure limit available
DNEL Exposure Limit Values:	AMMONIUM BICARBONATE - CAS: 1066-33-7
Worker Industry:	62.5 mg/m ³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry:	62.5 mg/m ³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry:	57 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry:	160.7 mg/m ³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry:	160.7 mg/m ³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer:	13.33 mg/m ³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer:	13.33 mg/m ³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Consumer:	143.91 mg/m ³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Consumer:	143.91 mg/m ³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer:	34.2 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values:

Target:	Fresh Water - Value: 0.37 mg/l
Target:	Marine water - Value: 0.037 mg/l
Target:	Freshwater sediments - Value: 0.1332 mg/kg
Target:	Marine water sediments - Value: 0.01332 mg/kg
Target:	STP - Value: 1347 mg/l
Target:	Soil (agricultural) - Value: 74.9 mg/kg

Exposure controls:

Eye protection:	Eyeglasses with side protection.
Protection for skin:	Overall.
Protection for hands:	Use protective gloves that provides comprehensive protection.
Suitable gloves type:	UNI EN 420/UNI EN 374
Respiratory protection:	Breathing protection if gases/vapours are formed. Gas filter for gases/vapours of inorganic compounds (e.g. EN 14387 Type B) Gas filter for gases/vapours of alkaline compounds such as ammonia, amines (e.g. EN 14387 Type K). Breathing protection if dusts are formed.
Combination:	Filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles. (e. g. EN 14387 Type ABEK-P3) Suitable respiratory protection for higher concentrations or long term.
Effect:	Self-contained breathing apparatus.

Thermal Hazards: None.

Environmental exposure controls: None.

Appropriate engineering controls: None.

[cont...]

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties:**

Appearance and colour:	Solid
Odour:	Characteristic
Odour threshold:	3 ppm (ammonia)
pH:	±8 (sol 5%)
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	79 mbar (25°C), 526 mbar (50°C), 10 86 mbar (59°C)
Relative density:	1.58
Solubility in water:	18% w/w (20°C)
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	-2.4 (25°C)
Auto-ignition temperature:	N.A.
Decomposition temperature:	±60°C
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

Other information:

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties:	N.A.

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: None

Conditions to avoid: Stable under normal conditions.

Incompatible materials: Alkalis, acids, nitrates and nitrites

Hazardous decomposition products: Toxic gases

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects:****Toxicological information of the product:** AMMONIUM BICARBONATE - CAS: 1066-33-7**Acute toxicity:****The product is classified:** Acute Tox. 4 H302**Test:** LD50**Route:** Oral**Species:** Rat = 1576 mg/kg**Skin corrosion/irritation:** Not classified

Based on available data, the classification criteria are not met

Serious eye damage/irritation: Not classified

Based on available data, the classification criteria are not met

Respiratory or skin sensitisation: Not classified

Based on available data, the classification criteria are not met

Germ cell mutagenicity: Not classified

Based on available data, the classification criteria are not met

Carcinogenicity: Not classified

Based on available data, the classification criteria are not met

Reproductive toxicity: Not classified

Based on available data, the classification criteria are not met

STOT-single exposure: Not classified

Based on available data, the classification criteria are not met

STOT-repeated exposure: Not classified

Based on available data, the classification criteria are not met

Aspiration hazard: Not classified

Based on available data, the classification criteria are not met

12. ECOLOGICAL INFORMATION**Toxicity:** Adopt good working practices, so that the product is not released into the environment.

AMMONIUM BICARBONATE - CAS: 1066-33-7

Not classified for environmental hazards.

Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 7

Aquatic acute toxicity:

Endpoint: LC50
Species: Fish = 102 mg/l
Duration h: 96

Persistence and degradability: N.A.

Bioaccumulative potential: N.A.

Mobility in soil: N.A.

Results of PBT and vPvB assessment:

vPvB Substances: None

PBT Substances: None

Other adverse effects: None

13. DISPOSAL CONSIDERATIONS

Waste treatment methods: Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

UN number: Not classified as dangerous in the meaning of transport regulations.

UN proper shipping name: N.A.

Transport hazard class(es): N.A.

Packing group: N.A.

Environmental hazards:

Special precautions for user: N.A.

Transport in bulk according to Annex II of Marpol and the IBC Code: N.A.

15. REGULATORY INFORMATION

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

[cont...]

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 8

Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: No restriction.

Restrictions related to the substances contained: No restriction.

Where applicable, refer to the following regulatory provisions: Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): N.A.

Chemical safety assessment: A Chemical Safety Assessment has been carried out for the mixture.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Full text of phrases referred to in Section 3: H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labelling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

[cont...]

SAFETY DATA SHEET

Ammonium Bicarbonate

Issued: 04/10/2021

Page 9

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

N.A.: Not Available

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWA: Time-weighted average

WGK: German Water Hazard Class.

Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.