



**Safety Data Sheet dated 4/1/2017, version 1**


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

- 1.1. Product identifier
- |               |                                 |
|---------------|---------------------------------|
| Trade name:   | AMMONIUM BICARBONATE, FFQ, PURE |
| CAS number:   | 1066-33-7                       |
| EC number:    | 213-911-5                       |
| REACH number: | 01-2119486970-26-XXXX           |
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- Recommended use:  
FOOD ADDITIVE  
FOR PROFESSIONAL USE  
FOR INDUSTRIAL USE
- 1.3. Details of the supplier of the safety data sheet
- Company:  
Intra Laboratories Ltd  
Unit 8, Devonshire Meadows  
Plymouth, Devon PL6 7EZ
- Competent person responsible for the safety data sheet: admin@intralabs.co.uk
- 1.4. Emergency telephone number , Dan  
Mckintosh 01752 724109

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**SECTION 2: Hazards identification**

- 2.1. 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

- 2.2. 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.
- Special Provisions:  
None
- Special provisions according to Annex XVII of REACH and subsequent amendments:  
None

- 2.3. Other hazards
- vPvB Substances: None - PBT Substances: None
- Other Hazards:  
No other hazards

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## AMMONIUM BICARBONATE

### SECTION 3: Composition/information on ingredients

#### 3.1. 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

#### 3.2. Mixtures

N.A.

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### SECTION 4: First aid measures

#### 4.1. 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.

#### 4.2. Most important symptoms and effects, both acute and delayed

None

#### 4.3. 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

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

- Do not inhale explosion and combustion gases.
- 5.3. 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.

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## **SECTION 6: Accidental release measures**

- 6.1. Personal precautions, protective equipment and emergency procedures  
Wear personal protection equipment.  
Remove persons to safety.  
See protective measures under point 7 and 8.
- 6.2. Environmental precautions  
Do not allow to enter into soil/subsoil. Do not allow to enter into 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
- 6.3. Methods and material for containment and cleaning up  
Wash with plenty of water.
- 6.4. Reference to other sections  
See also section 8 and 13

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## **SECTION 7: Handling and storage**

- 7.1. 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.
- 7.2. 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.
- 7.3. Specific end use(s)  
None in particular

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## **SECTION 8: Exposure controls/personal protection**

- 8.1. Control parameters  
No occupational exposure limit available
- DNEL Exposure Limit Values  
AMMONIUM BICARBONATE - CAS: 1066-33-7  
Worker Industry: 62.5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
Worker Industry: 62.5 mg/m<sup>3</sup> - 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<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects  
Worker Industry: 160.7 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

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Consumer: 13.33 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 13.33 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 143.91 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 143.91 mg/m<sup>3</sup> - 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

AMMONIUM BICARBONATE - CAS: 1066-33-7

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

### 8.2. Exposure controls

#### Eye protection:

Eye glasses 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 longterm

effect: Self-contained breathing apparatus.

#### Thermal Hazards:

None

#### Environmental exposure controls:

None

#### Appropriate engineering controls:

None

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## SECTION 9: Physical and chemical properties

### 9.1. 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.

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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.

### 9.2. Other information

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

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## SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
None
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
Alkalis, acids, nitrates and nitrites
- 10.6. Hazardous decomposition products  
Toxic gases

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## SECTION 11: Toxicological information

- 11.1. Information on toxicological effects  
Toxicological information of the product:  
AMMONIUM BICARBONATE - CAS: 1066-33-7
  - a) acute toxicity  
The product is classified: Acute Tox. 4 H302  
Test: LD50 - Route: Oral - Species: Rat = 1576 mg/kg
  - b) skin corrosion/irritation  
Not classified  
Based on available data, the classification criteria are not met
  - c) serious eye damage/irritation  
Not classified  
Based on available data, the classification criteria are not met
  - d) respiratory or skin sensitisation  
Not classified  
Based on available data, the classification criteria are not met
  - e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met
  - f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
  - g) reproductive toxicity  
Not classified  
Based on available data, the classification criteria are not met
  - h) STOT-single exposure  
Not classified

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- Based on available data, the classification criteria are not met
- i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
  - j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
- N.A.

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#### SECTION 12: Ecological information

- 12.1. 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
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish = 102 mg/l - Duration h: 96
- 12.2. Persistence and degradability  
N.A.
- 12.3. Bioaccumulative potential  
N.A.
- 12.4. Mobility in soil  
N.A.
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects  
None

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#### SECTION 13: Disposal considerations

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

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#### SECTION 14: Transport information

- 14.1. UN number  
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name  
N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
N.A.

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#### SECTION 15: Regulatory information

- 15.1. 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  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)

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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.

15.2. Chemical safety assessment

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

### SECTION 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

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 4: First aid measures  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 15: Regulatory information  
SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

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

CAS: Chemical Abstracts Service (division of the American Chemical

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## AMMONIUM BICARBONATE

	Society).
CLP:	Classification, Labeling, 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 Labeling 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.
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.