

## AMMONIUM BICARBONATE

### SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

**Product Name:** Ammonium bicarbonate  
**Product Code:** 238  
**CAS#:**1066-33-7  
**Synonym:** Ammonium hydrogen carbonate  
**Chemical Name:** Not available  
**Chemical Formula:** CH<sub>5</sub>NO<sub>3</sub>  
**Formula weight:** 79.056

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

**Composition:**

**Name:** Ammonium bicarbonate  
**Toxicological Data on Ingredients:** Acute Tox. 4; Eye Irrit. 2;H302, H319

### SECTION 3: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**  
**Classification according to Regulation (EC) No 1272/2008**  
**Potential Acute Health Effects:**  
Acute toxicity, Oral (Category 4), H302  
**Potential Chronic Health Effects :** Not Available  
**Carcinogenic Effects:** Not available  
**Mutagenic Effects:** Not available.  
**Teratogenic Effects:** Not available.  
**Developmental Toxicity:** Not Available  
**Specific target organ toxicity -** Not available

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled If breathed in:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delay:** No data available

**Indication of any immediate medical attention and special treatment needed:** No data available

### SECTION 5: FIRE AND EXPLOSION DATA

**Extinguishing media**

**Suitable extinguishing media :**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.



## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions** Do not let product enter drains.

**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling:** Not available

**Conditions for safe storage, including any incompatibilities**

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

Heat sensitive.

**Storage Class:**

Not Available.

**Specific end use(s) A part from the uses:**

No other specific uses are stipulated.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure controls**

**Appropriate engineering controls** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure** Do not let product enter drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance Form</b>	: Crystalline
<b>Colour</b>	: White
<b>Odour</b>	: Not available
<b>Odour Threshold</b>	: Not available
<b>pH</b>	: Not available
<b>Melting point/freezing point</b>	: Not available
<b>Initial boiling point and boiling range</b>	: Not available
<b>Flash point</b>	: Not available
<b>Evaporation rate</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not available
<b>Upper/lower flammability or explosive limits</b>	: Not available
<b>Vapour pressure</b>	: Not available
<b>Vapour density</b>	: Not available
<b>Relative density</b>	: 1,580 g/cm <sup>3</sup>



**Water solubility** : 79,1 g/l at 20 °C - completely soluble  
**Partition coefficient** : Not available  
**Auto-ignition temperature** : Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

**Reactivity** no data available

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

**Possibility of hazardous reactions**

Not Available

**Conditions to avoid :**

Heat

**Incompatible materials**

Oxidizing agents, Strong acids, Nitrites, Nitrates Strong oxidizing agents

**Hazardous decomposition products Other decomposition products** - In the event of fire

#### SECTION 11: TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

**Acute Toxicity:**

LD50 Oral - Rat - male and female - 1.576 mg/kg

LC50 Inhalation - Rat - male and female - 4,5 h - > 4,74 mg/l

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

**Skin corrosion/irritation** no data available

**Serious eye damage/eye irritation** : Eye irritation (Category 2), H319

**Respiratory or skin sensitization** no data available

**Carcinogenicity** no data available

#### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity:**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 98,3 mg/l - 96 h

**Persistence and degradability:**

Not Available

**Bioaccumulative potential** :Not available

**Mobility in soil** no data available

**Results of PBT and vPvB assessment PBT/vPvB assessment** not available

**Other adverse affects** no data available

#### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods** Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging** Dispose of as unused product.

#### SECTION 14: TRANSPORT INFORMATION

**UN number:**

**ADR/RID:**

**UN proper shipping name**

**IMDG:**

**IATA:**



**ADR/RID:** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

**Transport hazard class(es):**

**ADR/RID:**

**IMDG:**

**IATA:**

**Packaging group:**

**ADR/RID:**

**IMDG:**

**IATA:**

**Environmental hazards:**

**ADR/RID:** No

**IMDG Marine pollutant:** No

**IATA:** Yes

#### **SECTION 15: OTHER REGULATORY INFORMATION**

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **Other regulations**

Take note of Dir 94/33/EC on the protection of young people at work.

#### **SECTION 16: OTHER INFORMATION**

**References: Full text of H AND R-Statements.**

H302 Harmful if swallowed.

**Special Considerations:** Not available

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