

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.04.2022

Version number 2.00

Revision: 25.04.2022

### \* 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Ammonium hydrogen carbonate
- **Article number:** 2076
- **CAS Number:**  
1066-33-7
- **EC number:**  
213-911-5
- **Registration number** The substance is exempt from REACH-registration.
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Ingredient for pharmaceutical drugs
- **Uses advised against** No relevant information available.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
CAELO  
Caesar & Loretz GmbH  
Herderstr. 31  
D-40721 Hilden  
GERMANY
- **Further information obtainable from:**  
E-mail: info@caelo.de  
Tel.: +49210349940 (during regular opening hours)
- **Emergency telephone number:**  
Poison Information Center Bonn  
Venusberg-Campus 1, 53127 Bonn  
Tel: +49 (0) 228-192400

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Acute Tox. 4 H302 Harmful if swallowed.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning

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**· Hazard statements**

H302 Harmful if swallowed.

**· Precautionary statements**

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

### 3 Composition/information on ingredients

**· Chemical characterisation: Substances****· CAS No. Description**

1066-33-7 ammonium hydrogencarbonate

**· Identification number(s)****· EC number:** 213-911-5**· INCI-Name** AMMONIUM BICARBONATE

### 4 First aid measures

**· Description of first aid measures****· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Take off contaminated clothes and shoes, wash immediately with plenty of water and soap.

**· After eye contact:** Rinse opened eye for several minutes under running water.**· After swallowing:**

Drink plenty of water.

Call for a doctor immediately.

**· Information for doctor:****· Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Firefighting measures

**· Extinguishing media****· Suitable extinguishing agents:**

All regular extinguishing media can be used.

Use fire extinguishing methods suitable to surrounding conditions.

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

not combustible

In case of fire, the following can be released:

Carbon monoxide (CO)

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

**· Advice for firefighters**

**· Protective equipment:** In case of fire wear suitable protective clothes and respiratory protection.

**· Additional information**

Prevent from entering into drains. Fire residues must be disposed in accordance with official regulations.

### 6 Accidental release measures

**· Personal precautions, protective equipment and emergency procedures**

Avoid formation of dust.

Avoid contact with the substance.

**· Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**· Methods and material for containment and cleaning up:**

Take up dry. Clean up with water.

Dispose contaminated material as waste according to item 13.

**· Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

**· Handling:**

**· Precautions for safe handling** No special precautions are necessary if used correctly.

**· Information about fire - and explosion protection:** No special measures required.

**· Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:**

Tightly closed. Store at a dry place. At room temperature (+15°C to +25°C).

**· Information about storage in one common storage facility:** Not required.

**· Further information about storage conditions:** Protect from exposure to the light.

**· Storage class:** TRHS 510: 13 non-combustible solids

**· Specific end use(s)** No further relevant information available.

### \* 8 Exposure controls/personal protection

**· Additional information about design of technical facilities:** No further data; see item 7.

**· Control parameters**

**· Ingredients with limit values that require monitoring at the workplace:** Not required.

**· Exposure controls****· Personal protective equipment:**

**· General protective and hygienic measures:** Wash hands before breaks and at the end of work.

**· Respiratory protection:** Dust protection mask.

**· Protection of hands:** Protective gloves

**· Material of gloves**

Rubber gloves

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Natural rubber, NR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**· Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**· Eye protection:** Safety glasses

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### 9 Physical and chemical properties

**· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Solid**Colour:** White**· Odour:** Like ammoniac**· Odour threshold:** Not determined.**· pH-value (100 g/l) at 20 °C:** 9.4**· Change in condition****Melting point/freezing point:** 107–110 °C**Initial boiling point and boiling range:** Undetermined.**· Flash point:** Not applicable.**· Flammability (solid, gas):** Product is not flammable.**· Decomposition temperature:** Not determined.**· Auto-ignition temperature:** Not determined.**· Explosive properties:** Product does not present an explosion hazard.**· Explosion limits:****Lower:** Not determined.**Upper:** Not determined.**· Vapour pressure at 20 °C:** 67 hPa**· Density at 20 °C:** 1.59 g/cm<sup>3</sup>**· Bulk density:** 600 kg/m<sup>3</sup>**· Relative density** Not determined.**· Vapour density** Not applicable.**· Evaporation rate** Not applicable.**· Solubility in / Miscibility with****water at 20 °C:** 176 g/l**· Partition coefficient: n-octanol/water:** Not determined.**· Viscosity:****Dynamic:** Not applicable.**Kinematic:** Not applicable.

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· **Other information** No further relevant information available.

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### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
  - **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
  - **Possibility of hazardous reactions** No dangerous reactions known.
  - **Conditions to avoid** No further relevant information available.
  - **Incompatible materials:** hydrogen peroxide
  - **Hazardous decomposition products:**
    - Ammonia
    - Carbon dioxide
    - Carbon monoxide
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### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**
    - Harmful if swallowed.
  - **LD/LC50 values relevant for classification:**
    - Oral LD50 >1,470 mg/kg (rat)
    - Dermal LD50 2,000 mg/kg (rat)
    - Inhalative LC50 4,740 mg/m<sup>3</sup> /4h (rat)
  - **Primary irritant effect:**
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **Additional toxicological information:**
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
  - **Aspiration hazard** Based on available data, the classification criteria are not met.
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### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:**
    - LC50 >63.4 mg/L /4d (Fish)
    - EC50 3,231 mg/L /18d (Algae)
      - >145 mg/L /48h (invertebrates)
      - 1,895 mg/L /16h (Microorganism)
  - **Persistence and degradability** No further relevant information available.
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- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to local regulations.

### \* 14 Transport information

- |   |                                       |
|---|---------------------------------------|
| · <b>UN-Number</b>  | Not subject to transport regulations. |
| · <b>ADR, IMDG, IATA</b>  | not regulated                         |
| · <b>UN proper shipping name</b>  |                                       |
| · <b>ADR</b>  | not regulated                         |
| · <b>IMDG, IATA</b>   | not regulated                         |
| · <b>Transport hazard class(es)</b>   |                                       |
| · <b>ADR, ADN, IMDG, IATA</b>   |                                       |
| · <b>Class</b>  | not regulated                         |
| · <b>Packing group</b>  |                                       |
| · <b>ADR, IMDG, IATA</b>  | not regulated                         |
| · <b>Environmental hazards:</b>   | Not applicable.                       |
| · <b>Special precautions for user</b>                                       | Not applicable.                       |
| · <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.                       |

### \* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)** Not listed
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65
- **National regulations:**
- **Storage of hazardous substances in in nonstationary vessels (TRGS 510) (Germany)**  
TRHS 510: 13 non-combustible solids

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
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### 16 Other information

The information provided is based on our current level of knowledge. This MSDS has been compiled and is exclusively for this product intended.

- **Reasons for alterations** This version replaces all old versions.

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

- \* **Data compared to the previous version altered.**
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