

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

Printing date 13.01.2015

Version number 19

Revision: 13.01.2015

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

- **1.1 Product identifier**
- **Trade name:** Ammonium Hydrogen Carbonate
- **Article number:** 0013
- **CAS Number:**
1066-33-7
- **EC number:**
213-911-5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture :** For Laboratory, Research or Manufacturing use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Avantor Performance Materials B.V.
P.O.Box 1
7400 AA Deventer
The Netherlands
- Tel: (+31) (0)570 - 687500
Fax: (+31) (0)570 - 687574
E-mail : jtbaker.nl@avantormaterials.com
- **Informing department:**
E-mail : pawel.skiba@avantormaterials.com
Avantor Performance Materials Sales Office Tel.: +31(0) 570 687500
- **1.4 Emergency telephone number:**
Environment Health & Safety department
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Acute Tox. 4 H302 Harmful if swallowed.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Xn; Harmful
R22: Harmful if swallowed.
Xi; Irritant
R36/37: Irritating to eyes and respiratory system.
- **Information concerning particular hazards for human and environment:** void
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



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- **Signal word** Warning
- **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

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

P405 *Store locked up.*

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

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

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Designation:**
1066-33-7 Ammonium Hydrogen Carbonate
- **Identification number(s):**
- **EC number:** 213-911-5

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** *Supply fresh air; consult doctor in case of symptoms.*
- **After skin contact** *The product is not skin irritating.*
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing** *Instantly call for doctor.*
- **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** *Water with a full water jet.*
- **5.2 Special hazards arising from the substance or mixture** *No further relevant information available.*
- **5.3 Advice for firefighters**
- **Protective equipment:** *No special measures required.*

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** *Not required.*
- **6.2 Environmental precautions:** *No special measures required.*
- **6.3 Methods and material for containment and cleaning up:**
*Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.*
- **6.4 Reference to other sections**
*See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.*

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See Section 13 for information on disposal.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required
- **Information about protection against explosions and fires:** no special requirements
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store under dry conditions.
Keep container tightly sealed.
- **Recommended storage temperature:** >15 °C - <25 °C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Breathing protection recommended.
Filter P1.
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
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:**
Gauze goggles
Tightly sealed safety glasses.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Crystalline powder

Colour: White

· Smell: Ammonia-like

· Odour threshold: Not determined.

· pH-value (100 g/l) at 20 °C: 8

· Change in condition

Melting point/Melting range: 105 °C

Boiling point/Boiling range: Not determined

· Flash point: Not applicable

· Inflammability (solid, gaseous) Product is not inflammable.

· Ignition temperature:

Decomposition temperature: Not determined.

· Self-inflammability: Not determined.

· Danger of explosion: Product is not explosive.

· Critical values for explosion:

Lower: Not determined.

Upper: Not determined.

· Steam pressure at 20 °C: 66.7 hPa

· Density at 20 °C: 1.6 g/cm³

· 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): -2.4 log POW

· Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

· 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: Heat, boiling temperatures.

· 10.3 Possibility of hazardous reactions: No dangerous reactions known

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: Ammonia

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity: Harmful if swallowed.

· LD/LC50 values that are relevant for classification:

Oral	LD50	1576 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:**
redness, pain
Irritant effect.
- **Sensitisation:** No sensitizing effect known.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

EC50 / 16h	1895 mg/l (Pseudomonas putida.)
LC50/96h	37 mg/l (Fathead minnow (Pimephales promelas))

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class (D) 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

· **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**

· **Class** Void

· **Label** -

· **ADN/R Class:** Void

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

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|---|-----------------|
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · Kemler Number: | - |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | UN-, - |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



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- **Signal word** Warning
- **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** EHS
- **Contact:** Pawel Skiba
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ADR: Accord européen sur le transport 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4

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Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
· *** Data compared to the previous version altered.**

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