An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

#### **MATERIAL SAFETY DATA SHEET (MSDS)**

### **SECTION 1: Product identifiers**

Product Name Ammonium hydrogencarbonate, GR 99%+

Product Code: A 2187 CAS No: 1066-33-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no.: + 91 98200 41841 (10:00 am - 06:00 pm)

# **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard statement(s)

H302

Precautionary statement(s)

P264 P270

P301 + P312

unwell. P501

plant. Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram Signal Word

Hazard statement(s) Precautionary

statement(s) Supplemental Hazard

Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher.

Warning

Harmful if swallowed.

Wash skin thoroughly after handling.

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

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

Dispose of contents/ container to an approved waste disposal

Warning none

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## **SECTION 3: Composition/information on ingredients**

3.1 Substances

Synonyms : Ammonium hydrogen carbonate

Formula : CH5NO3

Molecular weight : 79,06 g/mol

CAS-No. : 1066-33-7

EC-No. : 213-911-5Section

| Component                   | Classification     | Concentration |
|-----------------------------|--------------------|---------------|
| ammonium hydrogen carbonate |                    |               |
| CAS-No. 1066-33-7           | Acute Tox. 4; H302 | <= 100 %      |
| EC-No 213-911-5             |                    |               |

#### **SECTION 4: First aid measures**

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower.

In case of eve contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

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(see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections For disposal see section 13.

# **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Heat sensitive.

O .

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

8.1 Control parameters

Ingredients with workplace control parameters

Derived No Effect Level (DNEL)

| Application Area        | Routes of exposure       | Health effect    | Value        |
|-------------------------|--------------------------|------------------|--------------|
| Worker DNEL, acute      | inhalation               | Systemic effects | 160,7 mg/m3  |
| Worker DNEL, acute      | inhalation               | Local effects    | 160,7 mg/m3  |
| Worker DNEL, longterm   | inh <mark>alation</mark> | Systemic effects | 62,5 mg/m3   |
| Worker DNEL, longterm   | inh <mark>alation</mark> | Local effects    | 62,5 mg/m3   |
| Worker DNEL, longterm   | dermal                   | Systemic effects |              |
| Consumer DNEL, acute    | inhalation               | Systemic effects | 143,91 mg/m3 |
| Consumer DNEL, acute    | oral                     | Systemic effects |              |
| Consumer DNEL, acute    | inhalation               | Local effects    | 143,91 mg/m3 |
| Consumer DNEL, longterm | dermal                   | Systemic effects |              |
| Consumer DNEL, longterm | inhalation               | Systemic effects | 13,33 mg/m3  |
| Consumer DNEL, longterm | oral                     | Systemic effects |              |
| Consumer DNEL, longterm | inhalation               | Local effects    | 13,33 mg/m3  |
| Consumer DNEL, longterm |                          |                  |              |

# Predicted No Effect Concentration (PNEC)

| Compartment                  | Value         |
|------------------------------|---------------|
| Fresh water                  | 0,37 mg/l     |
| Fresh water sediment         | 0,1332 mg/kg  |
| Sea water                    | 0,037 mg/l    |
| Sea sediment                 | 0,01332 mg/kg |
| Aquatic intermittent release | 0,63 mg/l     |
| Soil                         | 74,9 mg/kg    |
| Sewage treatment plant       | 1347 mg/l     |

#### 8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

This recommendation applies only to the product stated in the safety data sheet,

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supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Body Protection

protective clothing

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to

the used respiratory protection system. Recommended Filter type: Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure Do not let product enter drains.

# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor

d) Melting

point/freezing point

e) Initial boiling point and boiling range

f) Flammability (solid,

gas).

g) Úpper/lower

flammability or explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition

temperature

k) pH

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

513 hPa at 50 °C

p) Density

Relative density

g) Relative vapor

density

r) Particle

characteristics

s) Explosive properties t) Oxidizing properties

9.2 Other safety information

Dissociation constant 6.49 at 20 °C

- OECD Test Guideline 112

Relative vapor

density

2,73 - (Air = 1.0)

crystalline white

No data available

Melting point/freezing point: 60 °C

No data available

The product is not flammable

No data available

No data available No data available

No data available

7,0 - 8,5 at 79,1 g/l at 25 °C

Viscosity Viscosity, kinematic: No data available

Viscositý, dynamic: No data available 79,1 g/l at 20 °C - completely soluble Not applicable for inorganic substances

67,1 hPa at 20 °C

No data available No data available

No data available

No data available

No data available

none

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#### **SECTION 10: Stability and reactivity**

10.1 Reactivity

No data available

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

nitrates

nitrites

Acids

alkalines

10.4 Conditions to avoid

Heat.

no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish

LC50 - Oncorhynchus mykiss (rainbow trout) - 173 mg/l - 96 h

Remarks: (ECOTOX Database)

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

Remarks: (ECOTOX Database)

# 12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances

12.3 Bioaccumulative potential

No data available 12.4 Mobility in soil

No data available 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product: Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties

according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Avoid release to the environment.

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

No data available

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# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: 
14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available Further information

Not classified as dangerous in the meaning of transport regulations.

## **SECTION 15: Regulatory information**

15.1 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

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

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

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

## **SACTION 16: Other Information**

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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