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1. Identification

Product identifier used on the label

Ammonium Carbonate S Food Grade

Recommended use of the chemical and restriction on use

Recommended use*: food additive(s)

Recommended use*: food additive(s); Raw material

Unsuitable for use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

BASF Mexicana S.A. de C.V. Av. Insurgentes Sur 975 Col. CD. De Los Deportes, C.P. 03710 Ciudad de México MÉXICO

Telephone: +52 55 5325 2600

Emergency telephone number

<u>24 Hour Emergency Response Information</u> SETIQ: 1800-00-214-(Rep. Mexicana) or 55-59-15-88 (CDMX)

Telephone: +1-800-849-5204 or +1-833-229-1000

Other means of identification

Molecular formula: {(NH)4}(2)CO(3) Chemical family: No data available. Synonyms: Crystal Ammonia

2. Hazards Identification

According to Regulation NOM-018-STPS-2015

Classification of the product

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Acute Tox. 4 (oral) Acute toxicity

Eve Dam./Irrit. 2A Serious eve damage/eve irritation

Aquatic Acute Hazardous to the aquatic environment - acute

Label elements

Pictogram:



Signal Word: Warning

H402

Hazard Statement:

Causes serious eye irritation. H319 Harmful if swallowed. H302 Harmful to aquatic life.

Precautionary Statements (Prevention):

P280 Wear eye protection.

P273 Avoid release to the environment.

P270 Do not eat, drink or smoke when using this product. P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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.

P330 Rinse mouth

P337 + P313 If eye irritation persists: Get medical attention.

Precautionary Statements (Disposal):

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

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture. Irritating to eyes, respiratory system and skin (dust).

3. Composition / Information on Ingredients

According to Regulation NOM-018-STPS-2015

ammonium hydrogencarbonate

CAS Number: 1066-33-7

Content (W/W): 25.0 - <= 50.0%

Synonym: Ammonium hydrogencarbonate

ammonium carbamate

CAS Number: 1111-78-0

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Content (W/W): 25.0 - <= 50.0% Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

If inhaled:

After inhalation of decomposition products: Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Overexposure may cause:, vomiting, dyspnea, nausea, coughing

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

After inhalation of decomposition products: Pulmonary odema prophylaxis. Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary odema.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: water spray, carbon dioxide, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting: ammonia, carbon dioxide,

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Breathing protection required. Ensure suitable air extract/ventilation during cleaning/emptying of process machinery.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For residues: Sweep/shovel up.

Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation. Processing machines must be fitted with local exhaust ventilation. Avoid dust formation.

Protection against fire and explosion:

Store in a cool place. If heated the drums can burst due to pressure build-up.

Conditions for safe storage, including any incompatibilities

Segregate from nitrites and alkaline substances. Storage and transport only combined with food materials or food additives. Separate from flavoring agents.

Do not store with: Sodium nitrate, sodium nitrite

Suitable materials for containers: Aluminium, High density polyethylene (HDPE), glass, Low density polyethylene (LDPE), Stainless steel 1.4541, Stainless steel 1.4571, enamelled, rubberized

Further information on storage conditions: Keep container in a well-ventilated place. Keep container dry.

Storage stability:

Storage temperature: < 30 °C

The stated storage temperature should be noted.

Protect from temperatures above: 30 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator.

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Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. Avoid inhalation of dust. At the end of the shift the skin should be cleaned and skin-care agents applied.

9. Physical and Chemical Properties

Form: crystalline, powder Odour: strong, ammonia-like

Odour threshold: No data available., not determined

Colour: white pH value:

(100 g/l, 20 °C)

Melting point: The substance / product

decomposes.not applicable

not applicable Freezing point:

Study technically not feasible., The Boiling range:

substance / product decomposes

therefore not determined.

Boiling point: not applicable

Flash point: not applicable, the product is a solid

Flammability: not highly flammable not flammable (Regulation 440/2008/EC, A.10)

not self-igniting

Lower explosion limit: For solids not relevant for

classification and labelling.

Upper explosion limit: For solids not relevant for

classification and labelling.

Autoignition: The substance / product decomposes

therefore not determined.

Vapour pressure: 69 mbar

(20°C) 188 mbar (30°C)

Density: approx. 1.6 g/cm3

(20°C)

Bulk density: 780 - 830 kg/m3 Partitioning coefficient n--2.4 - -0.47

octanol/water (log Pow):

Self-ignition not self-igniting

temperature:

> 59 °C Thermal decomposition:

To avoid thermal decomposition, do not overheat.

not applicable, the product is a solid Viscosity, dynamic: Viscosity, kinematic: not applicable, the product is a solid

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Solubility in water: 320 g/l

(20°C)

Evaporation rate: negligible, The product is a non-

volatile solid.

10. Stability and Reactivity

Reactivity

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Exothermic reaction. Reacts with nitrites. Reacts with nitrates.

Conditions to avoid

Avoid heat. See SDS section 7 - Handling and storage.

Incompatible materials

strong bases

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: ammonia, carbon dioxide

Thermal decomposition:

> 59 °C

To avoid thermal decomposition, do not overheat.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion.

Oral

Type of value: LD50

Species: rat

Value: > 1,800 - < 2,150 mg/kg (BASF-Test)

Inhalation

Information on: ammonium hydrogencarbonate

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Type of value: LC50 Species: rat (male/female) Value: > 4.74 mg/l (other) Exposure time: 4.5 h An aerosol was tested.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: ammonium carbamate

Type of value: LC50 Species: rat (male/female)

Value: 6.6 mg/l (OECD Guideline 403)

Exposure time: 4 h

Product not examined: Value is calculated from the data of the components.

The product has not been tested. The statement has been derived from substances/products of a

similar structure or composition.

Dermal

Type of value: LD50 Species: rat (male/female) Value: > 2,000 mg/kg No mortality was observed.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

Information on: ammonium carbamate

Assessment of irritating effects: May cause severe damage to the eyes. Not irritating to the skin.

Information on: ammonium hydrogencarbonate

Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Skin

Species: rabbit Result: non-irritant

The product has not been tested. The statement has been derived from the properties of the

individual components.

<u>Eye</u>

Species: rabbit Result: non-irritant

Method: OECD Guideline 405

Sensitization

Assessment of sensitization: The chemical structure does not suggest a sensitizing effect.

Aspiration Hazard

No data available.

Chronic Toxicity/Effects

Genetic toxicity

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Assessment of mutagenicity: No data available concerning mutagenic effects. The chemical structure does not suggest a specific alert for such an effect.

Information on: ammonium hydrogencarbonate

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.

Information on: ammonium carbamate

Assessment of mutagenicity: Mutagenicity tests revealed no genotoxic potential. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Information on: ammonium hydrogencarbonate

Assessment of carcinogenicity: The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: ammonium carbamate

Assessment of carcinogenicity: Did not show carcinogenic effects in animal experiments. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Information on: ammonium hydrogencarbonate

Assessment of reproduction toxicity: Study scientifically not justified.

Information on: ammonium carbamate

Assessment of reproduction toxicity: Study scientifically not justified.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

LC50 (96 h) 61 mg/l, Oncorhynchus mykiss (Flow through.) Literature data.

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Aquatic invertebrates

EC50 (48 h) 63.7 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Nominal concentration.

Aquatic plants

EC50 (72 h) 75.9 mg/l (biomass), Desmodesmus subspicatus (DIN 38412 Part 9, static)

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 aquatic

activated sludge, domestic, non-adapted/EC20 (0.5 h): 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Inorganic product which cannot be eliminated from water by biological purification processes. Can be oxidized to nitrate, or be reduced to nitrogen, by microorganisms.

Bioaccumulative potential

Bioaccumulation potential

Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

Additional information

Other ecotoxicological advice:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

13. Disposal considerations

Waste disposal of substance:

Test for use in agriculture.

Dispose of in accordance with national, state and local regulations. Do not discharge into waterways or sewer systems without proper authorization.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

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Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

Further information

Specific national features of transport regulations must be observed. They are to be found in the shipping documents.

15. Regulatory Information

Federal Regulations

Not applicable

NFPA Hazard codes:

Health: 2 Fire: 0 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2022/10/20

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This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

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