SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0 Creation Date: Aug 13, 2017 Revision Date: Aug 13, 2017

1.Identification

1.1 GHS Product identifier

Product name calcium carbonate

1.2 Other means of identification

Product number

Calcium carbonate

1.3 Recommended use of the chemical and restrictions on use

For industry use only. Processing Aids and Additives no data available

Uses advised against

1.4 Supplier's details

Company Echemi.com Echemi.com Telephone Echemi.com Echemi.com

1.5 Emergency phone number

Emergency phone number Echemi.com

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

none

2. Hazard identification

2.1 Classification of the substance or mixture

Not classified

2.2 GHS label elements, including precautionary statements

Pictogram(s) Signal word No symbol No signal word.

Hazard statement(s)

Precautionary statement(s) Response none Storage none Disposal

2.3 Other hazards which do not result in classification

3. Composition/information on ingredients

3.1 Substances

| Chemical name | Common names and synonyms | CAS number | EC number | Concentration |
|-------------------|---------------------------|------------|-----------|---------------|
| calcium carbonate | calcium carbonate | 471-34-1 | none | 100% |

4.First-aid measures

4.1 Description of necessary first-aid measures

General advice

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

If inhaled

Fresh air

In case of skin contact

Rinse skin with plenty of water or shower.

In case of eve contact

Rinse with plenty of water (remove contact lenses if easily possible).

If swallowed

4.2 Most important symptoms/effects, acute and delayed

Exposure Routes: inhalation, skin and/or eye contact Symptoms: Irritation eyes, skin, respiratory system; cough Target Organs: Eyes, skin, respiratory system (NIOSH, 2016) Exposure Routes: inhalation, skin and/or eye contact Symptoms: Irritation eyes, skin, mucous membrane; cough, sneezing, rhinorrhea (discharge of thin mucus); lacrimation (discharge of tears) Target Organs: Eyes, skin, respiratory system (NIOSH, 2016)

Exposure Routes: inhalation, skin and/or eye contact Symptoms: Irritation eyes, skin, mucous membrane, upper respiratory system; cough, sneezing, rhinorrhea (discharge of thin mucus); lacrimation (discharge of tears) Target Organs: Eyes, skin, respiratory system (NIOSH, 2016)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

A serum calcium concentration exceeding 2.6 mmol per liter (10.5 mg per 100 mL) is considered a hypercalcemic condition. Withholding additional administration of calcium and any other medications that may cause hypercalcemia usually resolves mild hypercalcemia in asymptomatic patients, when patient renal function is adequate. /Calcium supplements/

5.Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

In case of fire in the surroundings, use appropriate extinguishing media.

5.2 Specific hazards arising from the chemical

no data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8

6.2 Environmental precautions

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers.

6.3 Methods and materials for containment and cleaning up

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Separated from acids, aluminium, ammonium salts, fluorine and magnesium. Separated from acids, aluminium and ammonium salts

8.Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

Recommended Exposure Limit: 10 Hour Time-Weighted Average: 10 mg/cu m (total); 5 mg/cu m (respirable fraction).

Biological limit values

no data available

8.2 Appropriate engineering controls

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

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eve/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

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities

Thermal hazards

no data available

9. Physical and chemical properties

Physical state

white or colourless crystals or white powder or chunks White hexagonal crystals or powder (Calcite); white orthrombic crystals or powder (Argonite); colorless hexagonal crystals

(vaterite) Odorless Odour

Melting point/ freezing point
Boiling point or initial boiling point and boiling 333.6°C at 760mmHg

Flammability Noncombustible SolidNot combustible Lower and upper explosion limit / flammability limitno data available Flash point Auto-ignition temperature 197°C

no data available 825°C pH = 8 to 9 **Decomposition temperature** pH Kinematic viscosity no data available In water:Insoluble Solubility Partition coefficient n-octanol/water (log value) no data available

0 mm Hg (approx) (NIOSH, 2016) 2.93g/mLat 25°C(lit.) Vapour pressure Density and/or relative density

Relative vapour density Particle characteristics no data available no data available

10.Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Indefinite shelflife.

10.3 Possibility of hazardous reactions

Not combustible.CALCIUM CARBONATE is non-combustible. Decomposes at high temperature (825°C) to give gaseous carbon dioxide and calcium oxide (quicklime). Incompatible with acids, alum, ammonium salts, fluorine, magnesium. Reacts with acids and acidic salts to generate gaseous carbon dioxide with effervescence (bubbling). The reaction with concentrated solutions of acids is rapid and exothermic. The effervescence can create extensive foaming. Ignites on contact with fluorine.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Calcium carbonate ... ignite and burn fiercely in contact with fluorine. /Fluorine: metal salts/

10.6 Hazardous decomposition products

When heated to decomposition it emits acrid smoke and irritating vapors.

11. Toxicological information

Acute toxicity

- Oral: LD50 Mouse oral 6450 mg/kg bw
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. Ecological information

12.1 Toxicity

- · Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Other adverse effects

no data available

13.Disposal considerations

13.1 Disposal methods

Produc

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

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

14.2 UN Proper Shipping Name

ADR/RID: unknown IMDG: unknown IATA: unknown

14.3 Transport hazard class(es)

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

14.4 Packing group, if applicable

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

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15.Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name | Common names and synonyms | CAS number | EC number | |
|--|--------------------------------|------------|-------------|--|
| calcium carbonate | calcium carbonate | 471-34-1 | none | |
| European Inventory of Existing Commercial Chemical Substances (EINECS) | | | | |
| EC Inventory | | | Listed. | |
| United States Toxic Substances Control Act (TSCA) Inventory | | | | |
| China Catalog of Hazardous chemicals 2015 | | | Not Listed. | |
| New Zealand Inventory of Chemicals (NZIoC | | | Listed. | |
| Philippines Inventory of Chemicals and Cher | nical Substances (PICCS) | | Listed. | |
| Vietnam National Chemical Inventory | | | Listed. | |
| Chinese Chemical Inventory of Existing Chemical Chemic | mical Substances (China IECSC) | | Listed. | |

16.Other information

Information on revision

Creation Date Aug 13, 2017 Aug 13, 2017 **Revision Date**

Abbreviations and acronyms

- · CAS: Chemical Abstracts Service
- CAS: Chemical Abstracts Service
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
 IMDG: International Maritime Dangerous Goods
 IATA: International Air Transportation Association

- TWA: Time Weighted Average
 STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
 LD50: Lethal Dose 50%
- LD50: Letnai Dosc 5070
 EC50: Effective Concentration 50%

References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/

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