

## SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Issue Date 30-Nov-2006 Revision Date 14-Feb-2023 Version 1.9

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product Code(s) 12001

Product Name Calcium Carbonate

Synonyms Calcium Carbonate Slaker rejects

**CAS No** 471-34-1

EC No (EU Index No) 207-439-9

Formula CaCO<sub>3</sub>

Molecular weight 100.09 g/mole

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

Recommended Use Laboratory Reagent.

Uses advised against Consumer use

## 1.3. Details of the supplier of the safety data sheet

#### **Supplier**

HACH UK Laser House Ground Floor, Suite B Waterfront Quay, Salford Quays GB - Manchester, M50 3XW Tel. +44 (0) 161 872 1487 info-uk@hach.com

HACH Ireland Unit 34 GB Business Park Little Island IRL-Co. Cork T45 H681 Tel. +353 (0)146 02 522 info-ie@hach.com

#### 1.4. Emergency telephone number

UK: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

## **Section 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

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Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.2. Label elements

**CAS No** 471-34-1

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### 2.3. Other hazards

No information available.

## PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Carbonic acid, calcium salt (1:1)	471-34-1 207-439-9 -	100%	Not classified	-	-	-

#### Full text of H- and EUH-phrases: see section 16

**Acute Toxicity Estimate** 

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L		Inhalation LC50 - 4 hour - gas - ppm
Carbonic acid, calcium salt (1:1) 471-34-1	6450 mg/kg	None reported	None reported	None reported	None reported

## **Section 4: FIRST AID MEASURES**

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#### 4.1. Description of first aid measures

General advice Take off contaminated clothing and shoes immediately. Show this safety data sheet to the

doctor in attendance.

**Inhalation** Remove to fresh air. If symptoms persist, call a doctor.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if

present and easy to do. Continue rinsing. If symptoms persist, call a doctor.

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a doctor.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

## Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

surrounding environment. Product itself does not burn.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

**Hazardous combustion products** This material will not burn.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

Additional information Fire residues and contaminated fire extinguishing water must be disposed of in accordance

with local regulations.

## Section 6: ACCIDENTAL RELEASE MEASURES

## 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information.

For emergency responders

Use personal protection recommended in Section 8.

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6.2. Environmental precautions

**Environmental precautions**Do not flush into surface water or sanitary sewer system. See Section 12 for additional

Ecological Information.

6.3. Methods and material for containment and cleaning up

**Methods for containment**Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and place in container for disposal according to local /

national regulations (see Section 13).

**Methods for cleaning up**Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections**See section 8 for more information. See section 13 for more information.

## **Section 7: HANDLING AND STORAGE**

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapours/spray.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s) Analytical reagent.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No

(PNEC)

No information available.

Additional information No information available.

8.2. Exposure controls

Engineering controls

Technical measures and appropriate working operations should be given priority over the

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use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific

workplace.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves

> must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

Skin and body protection Avoid contact with eyes, skin and clothing.

Respiratory protection Ensure adequate ventilation. Wear breathing apparatus if exposed to

vapours/dusts/aerosols.

ABEK-P1. Recommended filter type:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with General hygiene considerations

skin, eyes or clothing. Wash hands before breaks and after work.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

Physical state Solid

Odour Odourless Colour white

Odour threshold No data available

Remarks • Method **Property** Values

Molecular weight 100.09 g/mole

рΗ @ 20 °C 8.0

825 °C / 1517 °F Melting point / freezing point

Initial boiling point and boiling range No data available

Not applicable **Evaporation rate** Not applicable Vapour pressure

No data available Relative vapor density

**Specific Gravity** 2.711

**Partition coefficient** No data available

**Soil Organic Carbon-Water Partition** 

Coefficient

No data available

**Autoignition temperature** No data available

825 °C / 1517 °F **Decomposition temperature** 

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Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Relative density 2.8 g/cm<sup>3</sup> @ 20 °C

#### Solubility(ies)

## Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature_
Slightly soluble	~ 15 mg/L	25 °C / 77 °F

## Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature
Dilute Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

#### **Metal Corrosivity**

Steel Corrosion RateNot applicableAluminum Corrosion RateNot applicable

**Explosive properties** 

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Flammability

Upper flammability limit:No data availableLower flammability limitNo data available

Oxidising properties No data available.

Bulk density No data available

#### 9.2. Other information

No information available.

## **Section 10: STABILITY AND REACTIVITY**

10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

**Stability** Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

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#### 10.4. Conditions to avoid

**Conditions to avoid** Extremes of temperature and direct sunlight.

10.5. Incompatible materials

**Incompatible materials** Acids. Ammonia. Fluorine. Aluminium.

#### 10.6. Hazardous decomposition products

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating and toxic gases and vapours.

## **Section 11: TOXICOLOGICAL INFORMATION**

## 11.1. Information on toxicological effects

#### **Acute toxicity**

Based on available data, the classification criteria are not met

Mixture If available, see ingredient data below.

Substance Test data reported below.

#### **Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Carbonic acid,	Rat	6450 mg/kg	None reported	None reported	GESTIS
calcium salt (1:1)	LD <sub>50</sub>				

#### **Acute Toxicity Estimate (ATE)**

Not applicable

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Carbonic acid, calcium salt (1:1)	Draize Test	Rabbit	500 mg	24 hours	Moderate	RTECS

#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Carbonic acid, calcium salt (1:1)	Draize Test	Rabbit	0.750 mg	24 hours	SEVERE	RTECS

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#### Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance No data available.

#### STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance No data available.

#### **STOT - repeated exposure**

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance No data available.

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro **Data** If available, see ingredient data below.

Substance invitro **Data** No data available.

Mixture invivo **Data** If available, see ingredient data below.

Substance invivo **Data** No data available.

## Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture If available, see ingredient data below.

Substance No data available.

## Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance No data available.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### 11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

## 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

## 11.2.2. Other information

Other adverse effects No information available.

## **Section 12: ECOLOGICAL INFORMATION**

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12.1. Toxicity

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Mixture** 

Acute aquatic toxicity: If available, see ingredient data below.

Aquatic Chronic Toxicity: If available, see ingredient data below.

**Substance** 

Acute aquatic toxicity: No data available.

Fish:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Carbonic acid,	96 hours	Gambusia affinis	LC <sub>50</sub>	56000 mg/L	PEEN
calcium salt (1:1)					

Aquatic Chronic Toxicity: No data available.

12.2. Persistence and degradability

Mixture No data available.

12.3. Bioaccumulative potential

Mixture:No data available.Partition coefficientNo data available

12.4. Mobility in soil

Soil Organic Carbon-Water Partition No data available

Coefficient

## 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Carbonic acid, calcium salt (1:1)	The substance is not PBT / vPvB

## 12.6. Endocrine disrupting properties

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

## 12.7. Other adverse effects

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

## **Section 13: DISPOSAL CONSIDERATIONS**

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#### 13.1. Waste treatment methods

#### **Advice on Disposal**

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

#### Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous

substances, including mixtures of laboratory chemicals; hazardous waste.

#### Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous

substances, including mixtures of laboratory chemicals; hazardous waste.

**Contaminated packaging** Dispose of contents/containers in accordance with local regulations.

Other Information Do not reuse empty containers.

## Section 14: TRANSPORT INFORMATION

### **IMDG**

14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated14.5 Marine pollutantNot applicable

**14.6 Special precautions for user** See section 6-8 for more information

14.7. Transport in bulk according to Not applicable

Annex II of MARPOL and the IBC

Code

#### ADR

14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazards	Not applicable

**14.6 Special precautions for user** See section 6-8 for more information

IATANot regulated14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

**14.6 Special precautions for user** See section 6-8 for more information

#### **Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

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## **Section 15: REGULATORY INFORMATION**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **European Union**

#### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Carbonic acid, calcium salt (1:1) - 471-34-1	75.	

**Persistent Organic Pollutants** 

Not applicable

#### Dangerous substance category per Seveso Directive (2012/18/EU)

Non-controlled

## Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

#### Germany

Water hazard class (WGK) non-hazardous to water (nwg)

International Inventories

**EINECS/ELINCS** Complies Complies **TSCA** Complies DSL/NDSL Complies **ENCS** Complies **IECSC KECL - Existing substances** Complies Complies **PICCS AICS** Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### 15.2. Chemical safety assessment

Chemical Safety Report Chemical safety assessments for substances in this mixture were not carried out.

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## **Section 16: OTHER INFORMATION**

 Issue Date
 30-Nov-2006

 Revision Date
 14-Feb-2023

**Revision Note** New SDS, SDS sections updated, 3, 9, 11, 12.

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

\*\* Hazard Designation

ADN Accord européen relatif au transport international des marchandises dangereuses par voies

de navigation intérieure

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE Acute Toxicity Estimate

CAS Chemical Abstracts Service Number

Ceiling Maximum limit value

CLP Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No.

1272/2008]

DNEL Derived No Effect Level (DNEL)

EC European Community

ECHA ECHA (The European Chemicals Agency)
EC50 Effective Concentration to 50% of a test population

EEC European Economic Community

EN European Standard

IMDG International Maritime Dangerous Goods (IMDG)
IATA International Air Transport Association (IATA)

IATA-DGR International Air Transport Association - Dangerous Goods Regulations

ICAO International Civil Aviation Organization

ICAO-TI International Civil Aviation Organization - Technical Instructions
IUCLID (The International Uniform Chemical Information Database)
GHS Globally Harmonized System of Classification and Labelling of Chemicals

LOAEL Lowest observed adverse effect level

LOAEC Lowest observed adverse effect concentration LC50 Lethal Concentration to 50% of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

MAK Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit

value, which relates to safe daily exposure levels to chemical substances

NOAEL NOAEL (No observed adverse effect level)
NOAEC No observed adverse effect concentration

OSHA Occupational Safety and Health Administration of the US Department of Labour)

PEC Predicted Effect Concentration

PNEC Predicted No Effect Concentration (PNEC)

PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No.

1907/2006])

RID Règlement international concernant le transport des marchandises dangereuses par chemin

de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

RTECS RTECS (Registry of Toxic Effects of Chemical Substances)

TWA TWA (time-weighted average)

SKN\* Skin designation SKN+ Skin sensitisation

STEL STEL (Short Term Exposure Limit)
STOT Specific Target Organ Toxicity

STOT RE Specific target organ toxicity — repeated exposure STOT SE Specific target organ toxicity — single exposure

SVHC Substances of Very High Concern

TLV Threshold Limit Value

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TRGS Technical rules for hazardous substances, Germany

TSCA Toxic Substances Control Act

UN United Nations

vPvB very persistent and very bioaccumulative

VOC Volatile organic compounds

AwSV Administrative regulation of water polluting substances, Germany

## Key literature references and sources for data See Section 11: TOXICOLOGICAL INFORMATION See Section 12: ECOLOGICAL INFORMATION

#### Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method

Training Advice Take note of Directive 98/24/EC on the protection of the health and safety of workers from

the risks related to chemical agents at work

**Restrictions on use** For Laboratory Use Only.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**End of Safety Data Sheet** 

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