



Material Safety Data Sheet

(Calcium carbonate)

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name: Calcium carbonate
- Article number: P25-CM001-70040000
- Registration number: Not available.

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

- Application of the substance/the mixture: Laboratory chemicals.

1.3 Details of the supplier of the material safety data sheet

- Manufacturer/Supplier:
EDU-Science (HK) Ltd.
Suite 701, Wing On Plaza, 62 Mody Road, TST East, KLN, Hong Kong
Tel: (852) 23631681
Fax: (852) 23557663
Email: info@edu-science.com
Further information obtainable from: EDU-Science (HK) Ltd.

1.4 Emergency telephone number

- James Lai
Tel: +86 0769 83394188 Ext. 375 or 349

2. Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No. 1272/2008

CLP Pictogram GHS07:



- Skin irritation:
Category 2— H315: Causes skin irritation.
- Serious Eye Irritation:
Category 2— H319: Causes serious eye irritation.

2.1.2 Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Symbol:

Xi



Irritant

- R36/R38 - Irritating to eyes and skin.



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2.1.3 Classification system

The classification is according to the latest editions of the EU Directive 67/548/EEC, 1999/45/EC, 1907/2009EC and 1272/2008/EC, and extended by company and literature data.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

* GHS hazard pictograms



GHS07

* Signal word: Warning

* Hazard statements

H315: Causes skin irritation.

H319: Causes serious eye irritation.

* Precautionary statements

P264: Wash hands thoroughly after handling.

P280: Wear eye protection and protective gloves.

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

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P362: Take off contaminated clothing and wash before reuse.

P501: Dispose of contents and container in accordance with local regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition/information on ingredients

Chemical characterization: Solid

Description:

For the wording of the listed risk phrases refer to section 16.

<u>CAS No</u>	<u>EC No</u>	<u>Ingredient</u>	<u>Weight%</u>	<u>Classification</u>	<u>Hazardous</u>
471-34-1	207-439-9	Calcium carbonate	> 95%	Xi R36/R38 Skin Irrit. 2, H315 Eye Irrit. 2, H319	Yes

Remark:

Calcium carbonate (CAS no. 471-34-1)



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Synonyms: *Precipitated chalk; Aragonite; Agricultural limestone.*

4. First aid measures

4.1 Description of first aid measures

-After swallowing:

Do not induce vomiting. Obtain medical attention.

-After inhalation:

Move to fresh air if breathing is difficult, give oxygen get medical attention immediately.

-After eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention.

-After skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

4.2 Information for doctor : *Treat symptomatically.*

5. Firefighting measures

5.1 Extinguishing media

-Suitable extinguishing agent: CO2 powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.

5.2 Special hazard arising from the substance or mixture: *Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.*

5.3 Advice for firefighters: *As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.*

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

-Wear protective equipment. Keep unprotected persons away.

- Ensure adequate ventilation. Avoid dust formation.

6.2 Environmental precautions

- Do not allow to release into the environment.

6.3 Methods and material for containment and cleaning up

- Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

-Dispose 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 disposal information.

7. Handling and storage

7.1 Precautions for safe handling

-Information for safe handling

* Ensure good ventilation/exhaustion at the workplace.

* Prevent formation of dust.

* Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

* Containers of this material may be hazardous when empty since they retain product residues (dust, solids), observe all warnings and precautions.

-Information about fire and explosion protection: Not available.

7.2 Conditions for safe storage, including any incompatibilities

-Requirements to be met by storerooms and receptacles: Store in a cool, dry, ventilated area. Keep in a tightly closed container.

-Information about storage in one common storage facility

* Store away from foodstuffs.

* Store away from flammable substances.

-Further information about storage conditions: Store in a cool place.

7.3 Specific end use(s): Not available.

8. Exposure controls/personal protection

8.1 Control parameters

* DNELs: Not available.

* PNECs: Not available.

* Additional information: The lists valid during the making were used as basis.

* Ingredients with limit values that require monitoring at the workplace.

Exposure limits:

Component: Calcium carbonate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 12 mg/m ³ STEL: 30 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³			VLA-ED: 10 mg/m ³

Italy	Portugal	The Netherlands	Finland	Denmark
	TWA: 10 mg/m ³			

Austria	Switzerland	Poland	Norway	Ireland
		NDS: 10 mg/m ³		

8.2 Exposure controls

-Personal protective equipment.



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-General protective and hygienic measures:

- * Keep away from foodstuffs, beverages and feed.
- * Immediately remove all soiled and contaminated clothing.
- * Wash hands before breaks and at the end of work.

-Respiratory protective:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

-Protection of hands:



*** Protective gloves**

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

*** 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.

-Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure.

-Eye protection: Use chemical safety goggles and/or full face shield. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and chemical properties

-9.1 Information on basic physical and chemical properties

-General Information

*** Appearance:**

Form: Solid

Colour: Off-white

* Odour: Odourless

-Ph-value: 8-9

-Change in condition:

Melting point/Melting range: 825 °C / 1517 °F

Boiling point/Boiling range: Not available



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<i>Freezing point:</i>	<i>Not available</i>
-Flash point:	<i>Not available</i>
-Flammability (solid, gaseous):	<i>Not available</i>
-Ignition temperature:	<i>Not available</i>
-Self-igniting:	<i>Product is not self-igniting.</i>
-Danger of explosion:	<i>Product does not present an explosion hazard.</i>
-Explosion limits:	
<i>Lower:</i>	<i>Not available</i>
<i>Upper:</i>	<i>Not available</i>
<i>Oxidizing properties:</i>	<i>Not available</i>
-Vapour pressure:	<i>Not available</i>
-Density:	2.83
-Evaporation rate:	<i>Negligible</i>
-Solubility in / Miscibility with water:	<i>Insoluble</i>
-Segregation coefficient (n-octanol /water):	<i>Not available</i>
-Viscosity	
<i>Dynamic:</i>	<i>Not available</i>
-Molecular Formula:	<i>C Ca O3</i>
-Molecular Weight:	<i>100.09</i>
9.2 Other information:	<i>Not available</i>

10. Stability and reactivity

10.1 Reactivity: *Not available*

10.2 Chemical stability: *Stable under ordinary conditions of use and storage.*

10.3 Possibility of hazardous reactions:

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous Reactions: None under normal processing.

10.4 Conditions to avoid

Thermal decomposition / conditions to be avoided: Heat, flames, ignition sources and incompatibles.

No decomposition if used according to specifications.

10.5 Incompatible materials

Material to be avoided: Strong oxidizing agents, Acids.

Dangerous reactions: No dangerous reaction known.

10.6 Hazardous decomposition products: *Carbon monoxide (CO), Carbon dioxide (CO₂). Calcium oxides.*

11. Toxicological information

- Information on toxicological effects

- Acute toxicity:



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LD/LC50 values relevant for classification:

CAS#: 471-34-1

Oral: LD50: 6450mg/kg (rat).

Dermal: LD50: 500mg/kg(rabbit).

Inhalation: LC50: 0.0812mg/L(rat).

-Primary irritant effect:

* On the skin: Irritating effect.

* On the eye: Irritating effect.

-Additional toxicological information

The product shows the following dangers according to the calculation method based on the EU Directives 68/548/EEC, 199/45/EC and Regulation 1272/2008/EC:

* Irritant

-Toxicokinetics, metabolism and distribution: Not available.

-Acute effects (acute toxicity, irritation and corrosivity): Product does not present an acute toxicity hazard based on known or supplied information.

-Sensitisation: No information available.

-Repeated dose toxicity: Not available.

-CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Not available.

12. Ecological information

12.1 Toxicity:

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

12.2 Persistence and degradability: Not available.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Not available.

12.5 Result of PBT and vPvB assessment: Not available.

12.6 Other adverse effects: Not available.

-Additional ecological information: Not available.

13. Disposal considerations

13.1 Waste treatment methods

-Product

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Dispose of in accordance with local regulations.

-Uncleaned packaging

Recommendation:

Disposal must be made according to official and local regulations.



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14. Transport information

14.1 Land transport ADR/RID (cross-border)

14.1.1 ADR/RID class:

Danger code (Kemler): -

14.1.2 UN-Number: -

14.1.3 Packaging group: -

14.1.4 Description of goods: -

Limited quantities(LQ): -

Transport category: -

Tunnel restriction code: -

14.2 Maritime transport IMDG

14.2.1 IMDG class: -

14.2.2 UN Number: -

Label: -

14.2.3 Packaging group: -

EMS Number: -

Marine pollutant: No

14.2.4 Proper shipping name: -

14.3 Air transport ICAO-TI and IATA-DGR

14.3.1 Transport hazard class (es)

ICAO/IATA class: -

14.3.2 UN/ID Number: -

Label: -

14.3.3 Packaging group: -

14.3.4 Proper shipping name: -

UN "Model Regulation": -

14.4 Environment hazards: Not available.

14.5 Special precautions for user: Not available.

14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

15. Regulatory information

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Calcium carbonate	207-439-9	-		X	X	-	X	X	X	X	KE-04487 X

Legend:

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

EINECS/ELINCS: European Inventory Lists.

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

PICCS: Philippines Inventory of Chemicals and Chemical Substances.



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ENCS: Japan Existing and New Chemical Substances.

CHINA: China Inventory of Existing Chemical Substances.

AICS: Inventory of Chemical Substances.

KECL: Existing and Chemical Substances.

-Labelling according to regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

* GHS hazard pictograms



GHS07

* Signal word: Warning

* Hazard statements

H315: Causes skin irritation.

H319: Causes serious eye irritation.

* Precautionary statements

P264: Wash hands thoroughly after handling.

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P362: Take off contaminated clothing and wash before reuse.

P501: Dispose of contents and container in accordance with local regulations.

-National regulations

* SVHC Candidate List of REACH Regulation Annex XIV authorization (18/6/2010)

None of the ingredients is listed.

* REACH Regulation Annex XVII Restriction

None of the ingredients is listed.

* REACH Regulation Annex XIV Authorization Recommendation List (01/02/2009)

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

The contents and format of this MSDS/SDS are in accordance with REGULATION (EC) No 1907/2006, 1272/2008, EU Commission Directive 1999/45/EC, 67/548/EEC.

-DISCLAIMER OF LIABILITY

The information in this MSDS/SDS was obtained from sources with us believe are reliable.

However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are



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beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.

-Relevant phrases

H315: Causes skin irritation.

H319: Causes serious eye irritation.

R36/38 - Irritating to eyes and skin

-Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DOR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH: American Conference of Governmental Industrial Hygienists.

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

DNEL: Derived No-Effect Level (REACH).

PNEC: Predicted No-Effect Concentration (REACH).

LC50: Lethal concentration, 50 percent.

LD50: Lethal dose, 50 percent.

Revision Date: 12.Jan.2011

Revision Summary: Not applicable

End of Material Safety Data Sheet