



VMPC BUSINESS JOINT STOCK COMPANY
Add.: LK02-19, No.117, 3-5 Gamuda Gardens street, C2 Urban area,
Gamuda Gardens, Hoang Mai ward, Hanoi, Vietnam
Tel.: 84-4-35134082/3/MB: 84-912817807; **Fax:** 84-4-35680398
MST: 0102543189 - **Website:** www.vmpc.com.vn - **Mail:** vmpcjs@gmail.com

MATERIAL SAFETY DATA SHEET (MSDS)

Date of issuance: January 2026

Date of expiry: December 2028

1. Identification of the Material and Supplier

1.1 Product Identifier

Product name: Calcium Hydroxide (Hydrated Lime)

Chemical Formula: Ca(OH)_2

CAS No.: 1305-62-0

1.2 Supplier Information

Supplier: **VMPC Business Joint Stock Company**

Address: LK02-19, No.117, 3-5 Gamuda Gardens street, C2 Urban area,
Gamuda Gardens, Hoang Mai ward, Hanoi, Vietnam

Tel: +84 24 3513 4082

Emergency phone: +84 912 657 417

Revision date: 2026

Version: 01

1.3 Recommended uses:

Water treatment

Environmental treatment

Construction materials

Chemical processing

Industrial applications

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin irritation – Category 2, H315

Serious eye damage – Category 1, H318

STOT SE – Category 3 (respiratory irritation), H335



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2.2 GHS Label Elements

Signal word: DANGER

Pictogram:



Hazard statements:

- H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation

Prevention statements

- P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response statements

- P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTRE or doctor/physician.
P32 Specific treatment is advised - see first aid instructions.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage statements

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal statements

None allocated.

2.3 Other hazards

No information provided.



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3. Composition / Information on Ingredients

Ingredient	CAS Number	EC Number	Content
CALCIUM HYDROXIDE	1305-62-0	215-137-3	>88%
CALCIUM OXIDE	1305-78-8	215-138-9	<75%
CALCIUM CARBONATE	471-34-1	207-439-9	<2%
MAGNESIUM HYDROXIDE	1309-42-8	215-170-3	<1%
IRON OXIDE (FE ₂ O ₃)	1309-37-1	215-168-2	<0.5%
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<0.1%
ALUMINIUM OXIDE	1344-28-1	215-691-6	<1%
IMPURITIES	-	-	<1%
MAGNESIUM OXIDE	1309-48-4	215-171-9	<1%

4. First Aid Measures

4.1 Description of first aid measures

Inhalation: Move person to fresh air and seek medical attention if irritation persists.

Skin contact: Wash with soap and plenty of water.

Eye contact: Rinse cautiously with water for at least 15 minutes and seek medical attention.

Ingestion: Rinse mouth with water and seek medical advice.

4.2 Most important symptoms and effect, both acute and delayed

Irritating to the eyes, skin and respiratory system, with possible burns

4.3 Immediate medical attention and special treatment needed

Treat as for moderate to strong alkali and symptomatically

5. Fire Fighting Measures

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non-flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

None allocated.



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6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the MSDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. Handling and Storage

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, removed from incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

7.3 Specific end uses

This product contains less than 1% crystalline silica and, therefore, is not considered a Crystalline Silica Substance

8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Aluminium oxide (a)	SWA [AUS]	--	10	--	--
Calcium carbonate (Limestone, Marble, Whiting)	SWA [AUS]	--	10	--	--
Calcium hydroxide	SWA [AUS]	--	5	--	--
Calcium oxide	SWA [AUS]	--	2	--	--
Iron oxide fume (Fe ₂ O ₃) (as Fe)	SWA [AUS]	--	5	--	--
Magnesium oxide (fume)	SWA [AUS]	--	10	--	--
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--



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Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye / Face: Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

Hands: Wear PVC or rubber gloves when handling material to prevent skin contact.

Body: Wear long sleeved shirt and full-length trousers.

Respiratory: Where an inhalation risk exists, wear a Class P1 (Particulate) respirator. At high dust levels, wear a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter or a Class P3 (Particulate) respirator.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	FINE WHITE POWDER
Odour	ODOURLESS
Flammability	NON-FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	580°C
Melting point	580°C
Evaporation rate	NOT AVAILABLE
pH	12.4 – 12.6 at 20°C
Vapour density	NOT AVAILABLE
Relative density	2.1 to 2.3
Solubility (water)	1.6 g/L
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE



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Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

Bulk density 450 kg/m³ to 500 kg/m³

10. Stability and Reactivity

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid contact with incompatible substances.

10.5 Incompatible materials

Incompatible (violently) with acids (e.g. nitric acid), maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus. Calcium hydroxide, or hydrated lime, is already neutralised and is not expected to undergo oxidation.

10.6 Hazardous decomposition products

May evolve calcium oxides when heated to decomposition.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity No known toxicity data is available for this product. Based on available data, the classification criteria are not met.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
CALCIUM HYDROXIDE	7300 mg/kg (mouse)	--	--
CALCIUM CARBONATE	> 2000 mg/kg (rat)	> 2000 mg/kg (rat)	> 3.0 mg/L
MAGNESIUM HYDROXIDE	8500 mg/kg (rat, mouse)	--	--
ALUMINIUM OXIDE	> 5000 mg/kg (rat)	--	--



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Skin	Irritating to the skin. Contact may result in irritation, redness, pain, rash, dermatitis and possible skin burns.
Eye	Causes serious eye damage. Contact may result in irritation, lacrimation, pain, redness and possible burns with prolonged contact.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Not classified as a mutagen.
Carcinogenicity	Not classified as a carcinogen.
Reproductive	Not classified as a reproductive toxin.
STOT - single exposure	Irritating to the respiratory system. Over exposure to dust may result in severe mucous membrane irritation of nose and throat, coughing and bronchitis.
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure. Adverse health effects are not anticipated given the non respirable nature of the silica quartz in this product (as supplied).
Aspiration	This product does not present an aspiration hazard.

12. Ecological Information

12.1 Toxicity

The aquatic toxicity of calcium hydroxide is due to its alkalinity.

12.2 Persistence and degradability

Neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation.

12.3 Bioaccumulative potential

Calcium hydroxide does not bioaccumulate in the environment.

12.4 Mobility in soil

Not available, but considered low.

12.5 Other adverse effects

No information provided.

13. Disposal Considerations

13.1 Waste treatment methods

Waste disposal Neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).



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Legislation Dispose of in accordance with relevant local legislation.

14. Transport Information

Not classified as dangerous goods according to ADR, IMDG, IATA.

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Not a Marine Pollutant.

14.6 Special precautions for user

Hazchem code None allocated.

15. Regulatory Information

Complies with EU Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH), Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

16. Other Information

Additional information:

16.1 PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.



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16.2 HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

For VMPC BUSINESS JSC.

