



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : CHAUX DE PAVIERS

Product code : CHPAVHL2.

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

Natural hydraulic lime for making render, colorwash, mortar, injection grout.

1.3. Details of the supplier of the safety data sheet

Registered company name : PAREXGROUP S.A.

Address : 19, place de la résistance - CS 50053.92445.Issy les Moulineaux Cedex.France.

Telephone : (33)01.41.17.20.00. Fax : 01.41.17.21.30.

fds.matiere-fr@parex-group.com

www.parexlanko.com

For UK : Emergency telephone number : 01827 711755 (Mon - Fri 08:30 - 16:30).

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).

This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This substance does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

EC 285-561-1 HYDRAULIC LIME

Hazard statements :

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Precautionary statements - General :

P102 Keep out of reach of children.

Precautionary statements - Prevention :

P261 Avoid breathing dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

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

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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 CENTER or a doctor.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
Precautionary statements - Disposal :	
P501	Dispose of contents/container in a waste collection point. Beforehand, hydraulic lime should be inerted by hardening with water, packaging should be emptied completely.

2.3. Other hazards

The substance does not fulfil the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 2270	GHS07, GHS05		100%
CAS: 85117-09-5	Dgr		
EC: 285-561-1	Skin Irrit. 2, H315		
REACH: 01-2119475523-36-0004	Eye Dam. 1, H318		
	STOT SE 3, H335		
HYDRAULIC LIME			

Information on ingredients :

Calcium dihydroxyde/ 15-65% / EINECS : 215-317-3 / CAS : 1305-62-0
Calcium silicate / 10-45% / EINECS : 233-107-8 / CAS : 10034-77-2
Calcium carbonate / 10-40% / EINECS : 207-439-9 / CAS : 471-34-1
Impurities: no impurities relevant to classification and labeling.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

No known delayed effects. Contact a doctor/physician in all cases of severe exposure or if in doubt.

4.1. Description of first aid measures

In the event of exposure by inhalation :

Move the person to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops or if discomfort, coughing or other symptoms persist.

In the event of splashes or contact with eyes :

Do not rub eyes in order to avoid possible cornea damage as a result of mechanical stress.

Remove contact lenses if any. Incline head to injured eye, open the eyelid(s) widely and flush eye(s) immediately by thoroughly rinsing with plenty of clean water for at least 20 minutes to remove all particles.

Avoid flushing particles into uninjured eye. If possible, use isotonic water (0.9% NaCl). Contact a specialist of occupational medicine or an eye specialist.

In the event of splashes or contact with skin :

Remove all traces of product by gently and carefully brushing the affected areas of the body.

Rinse the affected area abundantly with running water.

Remove contaminated clothing, footwear, etc. and clean thoroughly before re-using them.

Seek medical treatment in all cases of irritation or burns.

In the event of swallowing :

Do not induce vomiting.

If the person is conscious, wash out mouth with water and give plenty of water to drink.

Get immediate medical attention or contact the anti-poison center.

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

The substance is presents a risk of serious eyes damage.

The substance is classified as irritant for the skin.

Prolonged skin contact with wet hydraulic lime can cause serious burns because they occur without the person feels pain. This can occur for example by kneeling in the wet mortar, even through trousers.

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

No immediate medical attention or special treatment is currently indicated. Follow the advice given in Section 4.1

When contacting a physician, take this SDS with you.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

Suitable extinguishing media: The product is not combustible. Use a dry powder, foam or CO2 fire extinguisher to extinguish the surrounding fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable methods of extinction

Do not use water

5.2. Special hazards arising from the substance or mixture

The product is non-combustible and non-explosive. It poses no special hazard in the event of fire

5.3. Advice for firefighters

Avoid dispersion of dust. Use breathing apparatus. Use fire-fighting equipment suitable to the local circumstances and specific environment. Do not discharge extinguisher water into the local environment.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Wear protective equipment as described under Section 8 and follow the advice for safe handling and use given under Section 7.

For first aid worker

Emergency procedures are not required.
However, respiratory protection is needed in situations with high dust levels.

6.2. Environmental precautions

Collect the spillage. Maintain the material in a dry state if possible. If possible, cover the area to prevent any unnecessary hazard caused by dust. Do not wash uncontrolled residues into groundwater networks or down drainage systems (increases pH). Any significant spillage into groundwater networks must be notified to the Environment Agency or any other competent body.

6.3. Methods and material for containment and cleaning up

Collect the product and place in a suitably labeled emergency container.
Prevent or limit the formation and spreading of dust.
Maintain the material in a dry state if possible.
Collect the product mechanically, in a dry state.
Use cleanup methods which do not cause airborne dispersion of the product, such as vacuum clean-up or vacuum extraction (portable industrial systems equipped with high-efficiency air filters - EPA and HEPA - according to standard NF EN 1822-1:2010 - or equivalent technique). Never use compressed air.

6.4. Reference to other sections

See Sections 8 and 13 for more details on exposure controls/personal protection and disposal considerations.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

7.1. Precautions for safe handling

Avoid contact with skin, eyes and mucous membranes. Wear appropriate protective equipment (refer to section 8 of this Safety Data Sheet). Do not wear contact lenses when handling this product. It is also advisable to have individual pocket eyewash. Avoid the formation and spreading of dust. Close sources of dust and use extraction fans (dust collector at handling points). Also include transportation systems. Comply with Directive 90/269/CEE when handling bags of natural hydraulic lime.

Fire prevention :

Handle in well-ventilated areas.
Prevent access by unauthorised personnel.

Recommended equipment and procedures :

Avoid inhalation, ingestion, as well as contact with your skin and eyes.
Barrier creams may be used.
Wash your hands after any handling.
General occupational hygiene measures are required to ensure a safe handling of the substance. These measures involve good personal and housekeeping practices, regular cleaning of the workplace, no eating, drinking or smoking in the workplace.
Shower and change clothes at the end of work. Do not wear contaminated clothes at home.
Separate work clothes from street clothes. Clean them separately.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the substance is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep out of reach of children.

Store in a dry place.

Bulk storage must be in dedicated silos.

Avoid contact with the air and humidity.

Incompatible materials: Strong acids and nitrogen compounds. Organic materials.

Packaging

Always keep in packaging made of an identical material to the original.

Do not use aluminum for transportation and storage if there is a risk of contact with water.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

Calcium dihydroxide (CAS 1305-62-0): VME : 5 mg/m³

Dust deemed to have no specific effect (Total dust) : VME : 10 mg/m³

Dust deemed to have no specific effect (Respirable dust) : VME : 10 mg/m³

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

Recommendations of the scientific committee on occupational exposure limits (SCOEL [reference 8]):

Acute effects: DNEL: 4 mg/m³ (respirable dust),

Long-term effects: DNEL: 1 mg/m³ (respirable dust).

Predicted no effect concentration (PNEC):

Calcium dihydroxide (CAS 1305-62-0):

PNEC Aquatic environment: 490 µg/l

PNEC Sun/groundwater: 1080 mg/l

8.2. Exposure controls

To control potential risks, generation of dust must be avoided. Appropriate protective equipment must be worn. Eye protection (e.g. goggles or visors) are required, unless all contact with eyes can be ruled out due to the nature and type of application (closed process). Where relevant, face protection, protective clothing and safety boots must be worn.

Appropriate engineering controls

If use of the product generates dust, use closed premises, local ventilation or other technical measures to maintain airborne dust levels below recommended exposure limits.

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Do not wear contact lenses.

Wear thick goggles fitted with side shields or wide vision goggles. It is also advisable to have individual pocket eyewash.

Envisage in the vicinity a clean water container or an ocular fountain in the event of projection in the eyes

- Hand protection

Since natural hydraulic lime is classified as a skin irritant, skin exposure should be kept to a minimum whenever technically possible.

Wear protective gloves made out of nitrile rubber (break-up time (min) > 480). Gloves used must comply with directive 89/686/EEC and corresponding standard NF EN 374.

- Body protection

Since natural hydraulic lime is classified as a skin irritant, skin exposure should be kept to a minimum whenever technically possible.

Use clothing fully covering skin (full length pants, long sleeved overalls, clothing with close fittings at openings) and footwear resistant to caustic products.

- Respiratory protection

Avoid breathing dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149.

Category :

- FFP1

If use of the product generates dust, use closed premises, local ventilation or other technical measures to maintain airborne dust levels below recommended exposure limits.

Wearing a dust mask adapted (P1)

When a person is potentially exposed to dust levels above Exposure Limits (see 8.1), use appropriate respiratory protection. The type of respiratory protection should be adapted to the dust level and conform to the relevant European standards. (NF EN 143, NF EN 149, NF EN 140 and NF EN 14387, NF EN 1827)

- Thermal risks

The substance shows no thermal hazard.

Exposure controls linked to environmental protection

Air from dust extraction or ventilation systems must be filtered before being discharged into the atmosphere.

Collect the discharge. Any significant discharge into bodies of water must be notified to the regulatory authority responsible for environmental protection.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information :**

Physical state :	Powder or dust.
Particle size :	20-30% : < 5 µm

Important health, safety and environmental information

pH (aqueous solution) :	12-13
pH :	Not stated.
	Strongly basic.
Boiling point/boiling range :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	2,6
Water solubility :	Dilutable. 1.5g/L à 20°C
Melting point/melting range :	0 °C.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.
True specific density	2,5 - 2,66 g/cm ³ à 20°C
Bulk specific density	0,5 - 0,76 g/cm ³ à 20°C
Melting point :	> 1000°C

9.2. Other information

No data relating to the miscibility or fat solubility (oil solvency) of the substance is available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This substance is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Minimize exposure to air and humidity to avoid deterioration.

10.5. Incompatible materials

Natural hydraulic lime reacts exothermically with acids to form salts.

In the presence of humidity, natural hydraulic lime reacts with aluminum and brass to produce hydrogen, according to the reaction: $\text{Ca(OH)}_2 + 2\text{Al} + 6\text{H}_2\text{O}$ results to $\text{Ca[Al(OH)}_4\text{]}_2 + 3\text{H}_2$

10.6. Hazardous decomposition products

The is no hazardous decomposition product to our knowledge.

Additional information: Calcium dihydroxide reacts with carbon dioxide to form calcium carbonate, which is a common material in nature.

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****11.1.1. Substances****Acute toxicity :**

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

Oral : LD50 (rat) > 2500 mg/kg (test substance Ca(OH)_2 rat).

Skin : Data not available.

inhalation : No inhalation toxicity observed. Based on available data, criteria justifying classification are not met.

HYDRAULIC LIME (CAS: 85117-09-5)

Oral route :

LD50 > 2000 mg/kg

Species : Rat

OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Skin corrosion/skin irritation :

Calcium Dihydroxide is irritant for the skin. By cross reference this result is applicable to NHLs.

On the basis of experimental tests on similar substances the NHLs are classified as irritant for the skin [skin Corrosion/Irritation, category 2 (H315- Cause skin irritation)].

Serious damage to eyes/eye irritation :

Calcium Dihydroxide has a risk of causing serious eyes damage (live studies in vivo, rabbit) .

By cross reference these results are applicable to NHLs

On the basis of experimental tests on similar substances the NHLs are classified as severe irritants for the eyes [serious eyes damage/irritation category 1 (H318 – Causes serious eye damage)].

Respiratory or skin sensitisation :

No data available.

No data available. Natural hydraulic lime is considered not to be a skin sensitiser, based on the nature of the effect (pH shift) and the essential requirement of calcium for human nutrition.

none of the compounds making up the other main constituents or impurities, i.e. calcium carbonate, calcium silicate, and calcined clay minerals, are known to entail any sensitisation potential.

Classification for sensitisation is not warranted.

Germ cell mutagenicity :

Bacterial assay for gene mutation (Ca(OH)_2 and CaO , Ames tests, OCDE 471): negative.

Mammal chromosome aberration test (Ca(OH)_2): negative.

By cross-referencing, these results are applicable to natural hydraulic lime.

No constituents of natural hydraulic lime or cement are known to be genotoxic.

The pH effect of natural hydraulic lime does not present a mutagenic risk.

There is a complete lack of epidemiological data to show the mutagenic potential of natural hydraulic lime.

The classification "genotoxic" is not justifiable.

HYDRAULIC LIME (CAS: 85117-09-5)

Mutagenesis (in vitro) :

Negative.

Species : Mammalian Cell Line

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity :

Calcium (administered as Ca-lactate) is not carcinogenic (experimental result rat). The pH effect does not present a carcinogenic risk.

The classification "carcinogenic" is not justifiable.

Reproductive toxicant :

Calcium (administered as Ca-carbonate) is not toxic to reproduction (experimental studies on mice).

The pH effect does not present a risk to reproduction. Clinical studies on humans and animals with different calcium slats have not shown an effect on reproduction or developmental.

NHLs are not toxic for reproduction or development.

The classification "toxic to reproduction" conforming to Regulation (CE)1272/2008 is not justifiable.

Specific target organ systemic toxicity - single exposure :

The substance is classified as toxic on some specific target organs following single exposure – category 3. It may cause irritation to the respiratory system

Based on data for humans (according to SCOEL recommendations) and by cross-referencing based on similar substances CaO and Ca(OH)₂, natural hydraulic lime is classed as an irritant to the respiratory system.

Specific target organ systemic toxicity - repeated exposure :

The toxicity of Calcium ingested is specified by the maximum tolerable limit (UL) for adults: UL = 2500 mg of Ca per day for adults over their lifetime corresponding to 36 mg of Ca per kg of bodyweight for an adult weighing 70kg (Data from CSAH: Comité scientifique de l'Alimentation Humaine).

The toxicity of natural hydraulic lime by skin absorption is not considered pertinent due to its insignificant absorption and the primary effect of local irritation (effect p H).

The toxicity due to inhalation (localized effects, mucous irritation) due to the CaO and the Ca(OH)₂ is determined by SCOEL as follows: DNEL = 1 mg/m³ breathable dust (see section 8.1).

DNEL = 1 mg/m³ breathable dust (see section 8.1).

The classification "toxic after repeated exposure" is not justifiable.

Aspiration hazard :

If large amounts are swallowed: burns to the mouth, the esophagus, the digestive tract, nausea and vomiting

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

In water environment and in the soil, exposure to NHLs means exposure to Calcium and hydroxide ions.

12.1.1. Substances

12.1.1 Acute/chronic toxicity to fish

LC50 (96h) for fresh water fish: 50.6 mg/l

LC50 (96h) for salt water fish: 457 mg/l

12.1.2 Acute/chronic toxicity to aquatic invertebrates

EC50 (48h) for fresh water invertebrates: 49.1 mg/l

LC50 (96h) for salt water invertebrates: 158 mg/l

12.1.3 Acute/chronic toxicity to aquatic plants

EC50 (72h) for fresh water seaweed: 184.57 mg/l

NOEC (72h) for fresh water seaweed: 48 mg/l

12.1.4 Toxicity to micro-organisms such as bacteria

In high concentration because of increases in temperature and pH, calcium oxide is used for the disinfection of sewage sludges.

Chronic toxicity to aquatic organisms

NOEC (14d) for salt water invertebrates: 32 mg/l

12.1.6 Toxicity to organisms in the soil

EC10/LC10 or NOEC for macro organisms in the soil: 2000 mg/kg of dry soil

EC10/LC10 or NOEC for micro organisms in the soil: 12000 mg/kg of dry soil

12.1.7 Toxicity to terrestrial flora

NOEC (21d) terrestrial plants: 1080 mg/kg

12.1.8 Overview

The product is likely to be harmful to the aquatic environment due to pH .

Although this product is useful to correct water acidity , an excess of more than 1 g / l may be harmful to aquatic life . Following dilution or carbonation , pH> 12 decreases rapidly.

HYDRAULIC LIME (CAS: 85117-09-5)

Fish toxicity :

LC50 = 50.6 mg/l

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 49.1 mg/l

Duration of exposure : 48 h

NOEC = 32 mg/l

Duration of exposure : 14 days

Algae toxicity :

ECr50 = 184.57 mg/l

Duration of exposure : 72 h

NOEC = 48 mg/l

Duration of exposure : 72 h

12.2. Persistence and degradability

Not relevant (inorganic substance).

12.2.1. Substances

HYDRAULIC LIME (CAS: 85117-09-5)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

Not relevant (inorganic substance).

12.4. Mobility in soil

Not relevant (inorganic substance).

12.5. Results of PBT and vPvB assessment

Not relevant (inorganic substance).

12.6. Other adverse effects

To be translated (XML)

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Dispose of the contents/packaging in a waste treatment center. Natural hydraulic lime must first be made inert by hardening with water and packaging must be completely emptied.

Waste :

Dispose of unused bags and contents in accordance with applicable local and national legislation.

Soiled packaging :

Bags are exclusively for containing the product and must not be utilized for any other use.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

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SECTION 15 : REGULATORY INFORMATION

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

Natural hydraulic lime is a substance in accordance with the REACH. As such it is not subject to registration.

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/669 (ATP 11)

- Container information:

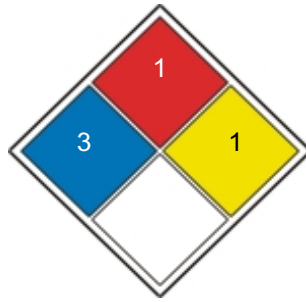
No data available.

- Particular provisions :

No data available.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=3 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

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

Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.