ALPENAT CK

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 16/09/2024 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Name : Cement, calcium sulfoaluminate, chemicals
Trade name : ALPENAT CK
UFI : 8J10-00YE-S00F-3TMK

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

Relevant identified uses

Use of the substance/mixture : Mixture used for building products formulation

1.3. Details of the supplier of the safety data sheet

S.A. VICAT
Direction Commerciale Ciments et Liants Hydrauliques -
4 Rue Aristide Bergès
FR 38080 L'Isle d'Abeau
France
T +33 4 74 27 59 00 , F +33 4 74 18 41 15
fds.ciment@vicat.fr

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	112 +356 2545 6508	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

When the product is in contact with water, during concrete or mortar manufacturing for example, or when the product is wet, a strong alkaline solution is formed.
Inhalation :
Frequent inhalation of large quantities of product over a long period of time increases the risk of developing lung diseases.
Eyes :
Eye contact with product (dry or wet) may cause serious and potentially irreversible injuries.
Skin :
Product may have an irritating effect on moist skin (due to transpiration or humidity) after prolonged contact.
Prolonged skin contact with wet product may cause serious burns because they develop without pain being felt.
Repeated skin contact with wet product may cause contact dermatitis.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07

Signal word (CLP) : Danger

Contains : Cement, calcium sulfoaluminate, chemicals

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P261 - Avoid breathing dust.
P280 - Wear eye protection, face protection, protective gloves, protective clothing.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P501 - Dispose of contents and container to an authorised waste collection point.

2.3. Other hazards

Other hazards which do not result in classification : The product contains chromate reducing agent (Tin sulphate). As a result, the content of soluble chromium (VI) is less than 0,0002 %. If the storage conditions are not appropriate or the storage period is exceeded, the effectiveness of the reducing agent can diminish, and the cement can become skin sensitizing. In the case of atopic dispositions (immediate hypersensitivity type allergy, IgE-dependent) the reactogenic threshold is not subject to any limit value. Consequently, end users are kindly invited to check their ability to present this atopic disposition and cease any contact in case of immediate reaction. In any case wearing PPI during manipulation is a pre-requisite.

To our knowledge, contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

To our knowledge, the mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cement, calcium sulfoaluminate, chemicals	CAS-No.: 960375-09-1 EC-No.: 895-411-2	99 - 100	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT SE 3, H335

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tin sulphate	CAS-No.: 7488-55-3 EC-No.: 231-302-2 REACH-no: 01-2119560591-39	< 0.1	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 Aquatic Chronic 3, H412

Comments : Specific concentration limits LCS: not concerned
Multiplication factor M: not concerned
Acute toxicity estimate (ATE): not relevant
Nanoparticle material: not concerned

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : In case of massive inhalation : Move the affected person to the fresh air. The throat and nostrils should clear themselves. Consult a doctor if irritation occurs, or if latter discomfort, coughing or any other symptoms appear.

First-aid measures after skin contact : If the product is dry: Wipe off as much as possible, Rinse with plenty of water. If the product is humidified: Rinse with plenty of water. Remove clothing, shoes, watches and other objects that have become contaminated and clean thoroughly before reuse. In case of irritation, redness or burns, consult a doctor.

First-aid measures after eye contact : Do not rub in order to avoid further damage to the cornea. If need be, remove contact lenses, then rinse immediately with copious amounts of clean water for at least 20 minutes, keeping the eyelids wide apart in order to eliminate any residue. If possible, use isotonic water (0.9% NaCL). Consult an occupational doctor or ophthalmologist.

First-aid measures after ingestion : On ingestion in large quantities: Do not induce vomiting. Rinse mouth with water. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation : The product can irritate the throat and the respiratory tract. Coughing, sneezing and difficulty breathing may occur if the average occupational exposure value is exceeded.

Symptoms/effects after skin contact : Dry product in contact with wet skin or exposure to moist or wet product may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion can cause severe burns.

Symptoms/effects after eye contact : Direct contact may damage the cornea due to rubbing, may cause immediate or subsequent irritation or inflammation. Larger quantities of dry product or splashes of mixed product may lead to consequences ranging from moderate irritation (conjunctivitis or blepharitis) to chemical burns and blindness.

Symptoms/effects after ingestion : Severe irritation or burns to the mouth, throat, oesophagus, and stomach. Nausea. Vomiting.

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

Treat symptomatically. If possible show this sheet, if not available show packaging or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing agents can be used.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Product is neither combustible, nor explosive and will not aid or feed the combustion of other materials.

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8. See Section 7 for information on safe handling.

Emergency procedures : Avoid contact with skin, eyes and clothing. Avoid breathing dust.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow product to spread into the environment. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

For containment : If possible, collect the spilled material in a dry state.
Dry product:
Use cleaning methods that do not cause airborne dispersion of the product, such as suction or vacuum extraction (portable industrial systems equipped with high efficiency air filters - EPA and HEPA - of standard EN 1822-1 - or equivalent technique). Never use compressed air.
It is also possible to clean the dust in a damp state using damp mops or push brooms, sprinklers or garden hoses (jet in "fine rain" to avoid projecting the dust in the air) and recover the sludge formed.
When wet cleaning or vacuuming the product cannot be applied and only dry brushing is possible, ensure that workers wear the appropriate personal protective equipment and avoid spreading dust.
Avoid inhalation of product and contact with skin. Collect the spilled product in a container. Solidify it before disposing of it as described in Section 13.
Wet product:
Collect the wet product and place it in a container. Allow material to dry and harden before disposing of as described in Section 13.

Methods for cleaning up : Wash contaminated area with large amounts of water.

Other information : Dispose of at a licensed waste collection centre. After setting, ALPENAT CK paste can be disposed of as normal building waste. ALPENAT CK paste hardens approximately 30 minutes to 4 hours after mixing with water.

6.4. Reference to other sections

For personal protective equipment, see section 8. For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid creating or spreading dust. Avoid contact with skin, eyes and clothing. Do not sweep. Use dry clean-up methods such as vacuum clean-up or vacuum extraction, which do not cause airborne dispersion. . Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. In order to limit the emission of dust for the bagged product used in an open mixer: first pour the water, then the product. Do not pour from a great height and start mixing at low regular speed.

Hygiene measures	:	Do not eat, drink or smoke when handling the product to avoid contact with skin or mouth. Wash hands immediately after handling product or products containing it. Remove contaminated clothing, shoes, watches and other items and clean separately and thoroughly before reuse. Immediately after handling the product, wash and possibly take a shower.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Control of soluble Cr (VI): If the Product is treated with Cr (VI) reducing agent according to the regulations referred to in section 15, the effectiveness of the reducing agent diminishes with time. In this case, the accompanying documents indicate the period during which the manufacturer has determined that the soluble Cr (VI) content is maintained by the reducing agent under the regulatory limit of 0.0002%, in accordance with EN 196.10. The conditions of storage necessary to retain the effectiveness of the reducing agent are also indicated.
Storage conditions	:	Bulk Product must be stored in silos that are watertight, dry (with reduced internal condensation), clean and protected from all contamination. Endangerment: To avoid any risk of choking or suffocation, do not enter an enclosed space such as a silo, hopper, bulk truck or any other container for storing or transporting the product without take appropriate security measures. In a confined space, the product can accumulate on the walls or adhere to them then disperse, collapse or fall suddenly.
Incompatible materials	:	Aluminium.
Special rules on packaging	:	Due to material incompatibility, aluminum containers should not be used for the storage or transport of wet product mixes.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Measures to reduce generation of dust and to avoid dust propagating in the environment such as dedusting, exhaust ventilation and dry clean-up methods which do not cause airborne dispersion.

Personal protection equipment

Eye and face protection

Eye protection:
Handling of the dry or wetted Product : Approved goggles or watertight goggles complying with ISO 16321-1

Skin protection

Skin and body protection:
Protective clothing (closed sleeves and collar) including waterproof pants. safety foot-wear. Dust-tight suit. Take care that moistened product does not enter safety shoes.

Hand protection:
Protective gloves in waterproof nitrile rubber or neoprene, made from a material containing little soluble Cr (VI). These gloves must be waterproof, wear-resistant and alkali-resistant.The gloves are only effective if the product particles do not penetrate between the gloves and the skin. The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard ISO 374-1. Breakthrough time (min) : 480. Always change damaged or soaked gloves immediately. Always have spare gloves in ready supply.

Respiratory protection

Respiratory protection:
When a person is potentially exposed to dust levels above exposure limits, use appropriate respiratory protection. The type of respiratory protection should be adapted to the dust level and conform to the relevant EN standard (EN 149) or national standard (dust mask FFP2). Or even use an FFP3 mask and type B filter

Thermal hazards

Thermal hazard protection:
Not applicable.

Environmental exposure controls

Environmental exposure controls:
Air: Environmental exposure control relating to the emission of product particles into the air must comply with available technologies and applicable regulations on dust emissions without specific effects.
Water: Do not wash product into sewers or waterways to avoid high pH. Above a pH of 9, negative eco-toxicological effects are possible.
Soil and Terrestrial Environment: No specific control measures are required for terrestrial exposure.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Grey.
Appearance	:	Powder.
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	> 1000 °C
Freezing point	:	Not applicable
Boiling point	:	Not applicable
Flammability	:	The product is not flammable
Oxidising properties	:	Non oxidizing material according to EC criteria.
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable (non-flammable solid)
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not determined
pH	:	Not available
pH solution	:	10 – 13.5 (Water/Powder 1:2 aqueous solution) (20°C)
Viscosity, kinematic	:	Not applicable
Solubility	:	Water: < 2 % (20°C)
Partition coefficient n-octanol/water (Log Kow)	:	Not applicable
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable
Vapour pressure	:	Not determined
Vapour pressure at 50°C	:	Not available
Density	:	0.8 – 1.7 g/cm³ Bulk density - 2.5-3.5 g/cm3 (actual density)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not applicable
Particle size	:	5 — 30 µm

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product, once mixed with water, hardens into a stable mass which does not react in a normal environment.

10.2. Chemical stability

Dry product are stable as long as they are properly stored (see Section 7) and compatible with most other building materials. They should be kept dry. . Wet product is alkaline and incompatible with acids, ammonium salts, aluminum or other non-noble metals. Product dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas. The product reacts with water to form silicates and calcium hydroxide. The silicates in the product react with strong oxidants such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Humid conditions during storage may cause lump formation and loss of product quality.

10.5. Incompatible materials

Acids. Ammonium salts. Aluminium and other non-noble metals. The uncontrolled use of aluminum powder in the wet product releases hydrogen and should therefore be avoided.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. The product does not break down into hazardous by-products and does not undergo polymerization.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

ALPENAT CK	
LD50 dermal rabbit	> 2000 mg/kg (Published data)

Skin corrosion/irritation : Causes skin irritation.
Additional information : Product in contact with wet skin may cause thickening of the skin and the appearance of cracks or cracks. Prolonged contact coupled with mechanical friction can cause severe burns. Some people may develop eczema from exposure to wet product dust caused by the high pH which induces irritant contact dermatitis after prolonged contact.

Serious eye damage/irritation : Causes serious eye damage.
Additional information : Direct contact with the product may cause damage to the cornea by mechanical friction, and immediate or delayed irritation or inflammation. Direct contact with large quantities of dry product or splashes of wet product can produce various effects ranging from moderate eye irritation (conjunctivitis or blepharitis for example) to chemical burns or blindness.

Respiratory or skin sensitisation : May cause an allergic skin reaction.
Additional information : Some individuals may develop eczema upon exposure to wet product dust, caused by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis.
If the product contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, an allergic sensitising effect is not expected.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : No evidence from human experience.
STOT-single exposure : May cause respiratory irritation.
Additional information : Product dust may irritate throat and respiratory tract. Exposure above the exposure limit values can cause coughing, sneezing and difficulty breathing. There is a body of evidence showing that occupational exposure to clinker dust has led to respiratory function deficits in the past. However, the indices currently available are insufficient to reliably establish a dose-response relationship for these effects.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Additional information : Medical conditions aggravated by exposure:
Repeated exposure to inhalable dust above the average occupational exposure value can cause coughing, sneezing and difficulty breathing and the onset of chronic obstructive pulmonary disease (COPD).
Inhalation of product dust may aggravate pre-existing respiratory tract disease and/or conditions such as emphysema or asthma and/or other pre-existing eye or skin conditions.
No chronic effects were observed at low concentrations.

Aspiration hazard : Not classified (Technical impossibility to obtain the data)

ALPENAT CK	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : To our knowledge, the mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : A priori the product does not present any hazard for the environment (LC50 aquatic toxicity is not yet determined). However, the addition of large amount of product in water may cause an increase in pH and therefore be toxic to aquatic organisms in certain circumstances.

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

ALPENAT CK	
Persistence and degradability	Not biodegradable.

12.3. Bioaccumulative potential

ALPENAT CK	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not applicable
Bioaccumulative potential	Not applicable (inorganic substance).

12.4. Mobility in soil

ALPENAT CK	
Ecology - soil	Not applicable.

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Cement, calcium sulfoaluminate, chemicals (960375-09-1), Tin sulphate (7488-55-3)(1)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Cement, calcium sulfoaluminate, chemicals (960375-09-1), Tin sulphate (7488-55-3)(1)

(1) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Product - product that has exceeded its shelf life
EWC entry: 10 13 99 (wastes not otherwise specified)
(and when demonstrated that it contains more than 0.0002% soluble Cr (VI)): shall not be used/sold other than for use in controlled closed and totally automated processes or should be recycled or disposed of according to local legislation or treated again with a reducing agent.

Product - unused residue or dry spillage
EWC entry: 10 13 06 (Other particulates and dust)
Pick up dry unused residue or dry spillage as is. Mark the containers. Possibly reuse depending upon shelf life considerations and the requirement to avoid dust exposure. In case of disposal, harden with water and dispose according to “Product – after addition of water, hardened”

Product – slurries
Allow to harden, avoid entry in sewage and drainage systems or into bodies of water (e.g. streams) and dispose of as explained below under “Product - after addition of water, hardened”.

Product - after addition of water, hardened
Dispose of according to the local legislation. Avoid entry into the sewage water system. Dispose of the hardened product as concrete waste. Due to the inertisation, concrete waste is not a dangerous waste.
EWC entries: 10 13 14 (waste from manufacturing of cement – waste concrete or concrete sludge) or 17 01 01 (construction and demolition wastes - concrete).

Additional information : Empty packaging completely and process according to local by-laws. Entries in the European waste catalogue: 15 01 01 (paper waste and cardboard packaging). The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

Ecological waste information : Do not allow to enter sewers, surface or groundwater.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport
No data available

Transport by sea
No data available

Air transport
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

Other information, restriction and prohibition regulations : Conformément au Règlement REACH, le produit est un mélange donc il n'est pas soumis à enregistrement. Le clinker tel que défini dans l'annexe V.10 de REACH, est exempté d'enregistrement. The marketing and use of product is subject to a restriction on the content of soluble Cr (VI) (REACH Annex XVII point 47 Chromium VI compounds):
1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0.0002 %) soluble chromium VI of the total dry weight of the cement.
2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement-containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.
3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
47.	ALPENAT CK	Chromium VI compounds

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
This sheet was updated (refer to the date at the top of this page). This sheet has been revised completely (changes were not marked).

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
LD50	Median lethal dose
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
Log Koc	adsorption coefficient
Pow (log)	n-octanol/water partition coefficient
PNEC	Predicted no-effect concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
PBT	Persistent Bioaccumulative Toxic
VME	Valeur Moyenne d'Exposition
vPvB	Very Persistent and Very Bioaccumulative

Data sources : (1) Portland Cement Dust - Hazard assessment document EH75/7, UK Health and Safety Executive, 2006. Available from: http://www.hse.gov.uk/pubns/web/portlandcement.pdf.

(2) Observations on the effects of skin irritation caused by cement, Kietzman et al, Dermatosen, 47, 5, 184-189 (1999).

(3) European Commission's Scientific Committee on Toxicology, Ecotoxicology and the Environment (SCTEE) opinion of the risks to health from Cr (VI) in cement (European Commission, 2002). http://ec.europa.eu/health/archive/ph_risk/committees/sct/documents/out158_en.pdf.

(4) Epidemiological assessment of the occurrence of allergic dermatitis in workers in the construction industry related to the content of Cr (VI) in cement, NIOH, Page 11, 2003.

(5) U.S. EPA, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 3rd ed. EPA/600/7-91/002, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1994a) and 4th ed. EPA-821-R-02-013, US EPA, office of water, Washington D.C. (2002).

(6) U.S. EPA, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 4th ed. EPA/600/4-90/027F, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1993) and 5th ed. EPA-821-R-02-012, US EPA, office of water, Washington D.C. (2002).

(7) Environmental Impact of Construction and Repair Materials on Surface and Ground Waters. Summary of Methodology, Laboratory Results, and Model Development. NCHRP report 448, National Academy Press, Washington, D.C, 2001.

(8) Final report Sediment Phase Toxicity Test Results with Corophium volutator for Portland clinker prepared for Norcem A.S. by AnalyCen Ecotox AS, 2007.

(9) TNO report V8801/02, An acute (4-hour) inhalation toxicity study with Portland Cement Clinker CLP/GHS 03-2010-fine in rats, August 2010.

(10) TNO report V8815/09, Evaluation of eye irritation potential of cement clinker G in vitro using the isolated chicken eye test, April 2010.

(11) TNO report V8815/10, Evaluation of eye irritation potential of cement clinker W in vitro using the isolated chicken eye test, April 2010.

(12) Investigation of the cytotoxic and proinflammatory effects of cement dusts in rat alveolar macrophages, Van Berlo et al, Chem. Res. Toxicol, 2009 Sept; 22(9):1548-58.

(13) Cytotoxicity and genotoxicity of cement dusts in A549 human epithelial lung cells in vitro; Gminski et al, Abstract DGPT conference Mainz, 2008.

(14) Comments on a recommendation from the American Conference of governmental industrial Hygienists to change the threshold limit value for Portland cement, Patrick A. Hessel and John F. Gamble, EpiLung Consulting, June 2008.

(15) Exposure to Thoracic Aerosol in a Prospective Lung Function Study of Cement Production Workers; Noto, H, et al; Ann. Occup. Hyg, 2015, Vol. 59, No. 1, 4–24.

(16) MEASE, Metals estimation and assessment of substance exposure, EBRC Consulting GmbH for Eurometaux, http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php.

(17) Occurrence of allergic contact dermatitis caused by chromium in cement. A review of epidemiological investigations, Kåre Lenvik, Helge Kjuus, NIOH, Oslo, December 2011.

(18) ECHA Support Questions and answers agreed with National Helpdesks. ID1695

May 2020. https://echa.europa.eu/es/support/qas-support/qas-agreed-with-national-helpdesks.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Irrit. 2	H315	Expert judgement
Eye Dam. 1	H318	Expert judgement
Skin Sens. 1	H317	Expert judgement
STOT SE 3	H335	Expert judgement

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.