

1. SUBSTANCE OR MIXTURE IDENTIFICATION AND COMPANY IDENTIFICATION

Product identifier:

Tradename: QUICK-SETTING NATURAL MINE CEMENT "MARFIL" ®

Product standards: UNE-EN 80309:2006

EINECS: 266-043-4 CAS: 65997-15-1

Cement clinker is exempt from registration – Art. 2.7(b) & Annex V, ap. 10 of the REACH

Relevant identified uses of the substance:

Natural cement is a hydraulic binder used in construction, used in pure paste or in the manufacture of mortars and concretes.

Supplier information on safety data sheet:

CEMENTOS COLLET S.L.
Colònia Collet d'Eyne s/n
08694 GUARDIOLA DE BERGUEDÀ
SPAIN
Tel./Fax: +34 93 822 73 70
info@cementoscollet.com
www.cementoscollet.com

Emergency number:

Manufacturer: +34 938227370
Emergency number: 112
National Poison Control Center: +34 91 562 04 20

2. HAZARDS IDENTIFICATION

When cement is mixed with water or exposed to high levels of humidity, a chemical reaction occurs forming an alkaline solution.

2.1 Classification of the mixture or the substance.

- Under regulation CE 1272/2008:



Danger indications

H315 Causes skin irritation.
H318 Causes serious ocular damages.
H317 May cause allergic skin reaction.
H335 Can irritate the respiratory tract.

- Under the directive 1999/45/CE:



Xi
Irritating

Danger symbol: Xi (irritating)

R36/37/38 Can irritate the skin, eyes and respiratory tract.
R41 Risk of ocular damage.
R43 May cause sensitization in contact with skin.

R36/37/38 Irritates the eyes, respiratory system and skin.

R43 May cause sensitization by skin contact.

S2 Keep out of reach of children.

S22 Do not breathe dust.

S24/25 Avoid contact with the eyes and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Use suitable gloves and face protection.

S46 If swallowed, seek medical advice immediately and show this packaging or label.

Additional information: The natural cement doesn't contain Cr VI.

2.2 Precautions:

P102: Keep out of reach of children.

P208: Use gloves, clothing, glasses and protective mask.

P305 – P351 – P310: In case of contact with eyes, rinse immediately with plenty water and seek medical advice.

P302 – P352: In prolonged contact with skin, wash with soap and water.
In case of skin irritation, consult a doctor.

3. COMPOSITION/INFORMATION OF INGREDIENTS

Chemical composition:

This natural quick-setting cement is composed primarily of silicates, aluminates and calcium sulfoaluminate in a major proportion, together with other elements: such a lime, magnesium, potassium sulfate and sodium in small amounts and in accordance with the standard UNE 80309/2006.

Information about components:

The natural quick-setting cement MARFIL® It comes only from the medium heat 1.000-1.200°C of a limestone-claystone obtained from a very specific geological stratum from underground sources and of a specific and uniform composition throughout the entire operation.

The natural cement MARFIL® responds to the directive 2003/53 CE and it does not require the incorporation of chromium reducing agent VI. Therefore it is a cement obtained without adding foreign substances to the specific composition of the raw material.

4. FIRST AID

4.1 Inhalation:

Move the affected person to a place where you can breathe clean air, drink plenty of water and clean the nostrils. Seek medical attention if symptoms of irritation or discomfort persist.

4.2 In contact with the eyes:

Rinse immediately with plenty of water and do not rub the eyes. Intense washing should be enough to calm the skin irritation of the cornea. Go to an ophthalmologist if the symptoms persist.

4.3 In contact with the skin:

When the cement is wet wash thoroughly the affected parts or stained clothing. If irritation occurs, consult a doctor.

4.4 Ingestion:

If ingestion has occurred accidentally, drink plenty of water to rinse your mouth intensively and consult a doctor.

4.5 Symptoms relating to use:

Inhaling large amounts of stone dust during handling can cause lung disease. Direct contact with eyes may cause severe eye irritation.

5. FIRE-FIGHTING MEASURES.

5.1 Natural cement is a fireproof product.

It doesn't need elements or extinguishing agents and it does not limit them.

6. MEASURES IN CASE OF ACCIDENTAL RELEASE.

6.1 Measures of personal protection:

Always use the cement protective equipment defined in paragraph 8, following the advice of handling as defined in section 7.

Does not require emergency procedures.

6.2 Environmental protection measures:

It is forbidden to pour cement into sewers or in the course of rivers.

6.3 Cleaning methods:

The usual, avoid raising dust when cleaning.

Use if central vacuum mechanical elements are necessary.

7. HANDLING AND STORAGE

7.1 Handling:

Avoid formation of dust during the application process.

Avoid contact with eyes, skin or inhalation.

7.2 Storage:

Either in bulk or in bags, natural cement should be stored in dry places and avoiding at all costs the moisture or excessive ventilation.

Stacking the bags stably.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Indicators:



8.2 Limited values of exposure:

The current occupational exposure limits for total dust are defined by the Environmental exposure limits Daily VLA / ED collected in the RD 347/2001 of April 6, about the health and safety of workers from the risks related to agents chemicals at work:

$$\text{VLA/ED} = 10 \text{ mg./m}^3 \text{ (8 work hours)}$$

In the list of Occupational Exposure to chemical agents Spain states that the concentration of insoluble or poorly soluble particles should not exceed the following amount:

$$\begin{aligned} \text{inhalable fraction VLA/ED} &= 10 \text{ mg./m}^3 \\ \text{breathable fraction VLA/ED} &= 3 \text{ mg./m}^3 \end{aligned}$$

8.3 Exposure control:

- General:
- Respiratory protection using adjustable dust mask.
 - Protect hands with impervious gloves of rubber or nitrile approved to use.
 - Eye protection tightly sealed and approved glasses.

- Hygiene:
- Avoid smoking, eating or drinking while handling cement.
 - Avoid direct contact with cement powder or paste.
 - Avoid using dirty work clothes or contaminated with cement stains. Wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Aspect:</u>	Pulverized inorganic material.
<u>Colour:</u>	Powder, yellowish. Once applied and dried it depends on the humidity curing.
<u>Grit:</u>	30-35 % of fines ≤ 5 mm.
<u>Solubility:</u>	Slightly soluble. A 20°C 0,1 -1,5g/l
<u>Density:</u>	2,75 a 3,10 g/cm ³ (20°C)
<u>Apparent density:</u>	0,75 a 1 g/cm ³ (20°C)
<u>PH (20°C):</u>	11,5
<u>Melting temperature:</u>	> 1.000°C
<u>Flammability limit:</u>	No limit

10. STABILITY AND REACTIVITY

Dry cement is stable when stored properly, it is compatible with other building materials. When mixed with water forms a stable stone mass and resistant to environmental conditions.

The humidity and contact with air can cause lumps and loss of features. Cement does not decompose into toxic byproducts or polymerized.

11. TOXICOLOGICAL INFORMATION

11.1 High toxicity

In contact with the eyes: Cement in direct contact with eyes may cause damage to the cornea, immediate or delayed irritation or inflammation.

Exposure to large amounts of cement can cause moderate to severe burns to the eye or in extreme cases, blindness.

In contact with the skin: The cement can irritate the skin due to wet cement PH. It can cause dermatitis, cracking or caustic burns without previous symptoms.

11.2 Chronic effects:

Inhalation: Cement may irritate the throat and respiratory tract, if you exceed the limit for profession exposure, chronic obstructive pulmonary disease may be caused.

Carcinogenicity: There has not been any causal relationship established between the development of cancer and exposure to cement.

Mutagenesis: There is no mutagenic effect.

11.3 Health states aggravated by the exposure:

Breathing cement dust may aggravate processes or previously diagnosed diseases such as respiratory diseases, emphysema, asthma or diseases related to the eyes or skin diseases.

12. ECHOLOGICAL INFORMATION

12.1 Ecotoxicity:

The addition of large amounts of cement to water can cause elevated pH and therefore can affect the aquatic environment in certain circumstances.

However it is a product that is considered to be non-dangerous for the environment. Cement is an inorganic material, therefore it poses no toxic risk after setting.

12.2 Mobility:

Cement is a volatile product, so when dry handling it can produce powder.

13. CONCERNING CONSIDERATIONS TO ELIMINATION.

The product that passed the period of effectiveness should be discarded, in compliance with the labor legislation about waste.

Prevent entry into drains or sewers.

The product must be removed once produced the set, in compliance with the law on waste.

Cement is inert therefore not considered a dangerous waste.

Manage the container in accordance with national legislation.

Code LER 150101 – Packaging waste of paper and cardboard.

150105 –Compound waste containers.

14. TRANSPORT INFORMATION

According to international regulations, the cement is not considered dangerous waste, so there is no regulation for the transport of cement.

15. REGULATORY INFORMATION

15.1 Regulations and legislation on health, safety and environment specific for this substance:

Cement clinker is exempt from registration under art. 2.7 (b) and Annex V, par. 10 of REACH.

15.2 Source of used data:

Regulation (CE) N° 1272/2008 of the Parliament and European Council of 16th December 2008 about classification, labeling and packaging of substances and mixtures, which directives are modified and derogate 67/548 CEE, 1994/45 CEE and the regulation CE n° 1907/2006, modified by the regulation (UE) n° 453/2010.

The information contained in this document is based on the updated product knowledge to which it relates. Any other use not specified by the product, including its use with other materials or in other processes, is the responsibility of the user.

The user is responsible for establishing appropriate security measures and meet all legal requirements that are applicable to its activity.