

POLIPLUS FEINCompilation day: 10/04/2014
Revision day: 16/11/2021**1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**Product name: POLIPLUS FEIN
Chemical Type: Mixture**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Lightweight thermal insulating mixture based on cement and EPS beads for under screed applications or final screed layer on floors and for thermal insulation and/or without simultaneous gradient formation on roofs.

Relevant uses are listed above. No other uses are recommended unless an assessment has been conducted prior to the start of that use, which demonstrates that the risks associated with that use are controlled.

1.3 Details of the supplier of the safety data sheetName: TEKTO HELLAS S.A.
Offices: Zakka 10 str, P.O. box 56727, Neapoli, Thessaloniki, Greece. Tel: +30 2310 511 871
Factory: 10th klm Thessaloniki – Neochorouda. Tel: +30 2310 782 007
E-mail: tekto@tekto.gr - web: www.tekto.gr
Representative responsible for this SDS: Architektonidis Theodoros: th.architektonidis@tekto.gr**1.4 Emergency telephone number**Greece: Poison control center
Children hospital "P. and A. Kyriakou"
Emergency telephone number: +302107793777
Open: 24 hours
Email: poison_ic@aglaiakyriakou.gr**2. Hazards identification****2.1 Classification of the substance or mixture****Classification:** Mixture

This product contains cement dust, which is irritating to the eyes, to the respiratory system, the mucous membranes and the skin, when there is a prolonged contact. The cement based mixtures, because of their high pH, can cause irritation to the skin when the contact is repeated or extended and eye injuries may occur in case of contact; in case of significant ingestion, ulceration of the digestive tract may occur.

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard classification	Hazard category	Hazard statement
Skin irritation	2	H315 Causes skin irritation
Serious eye damage / eye irritation	1	H318 Causes serious eye damage
Skin sensitization	1B	H317 May cause an allergic skin reaction
Specific target organ toxicity / single exposure / respiratory tract irritation	3	H335 May cause respiratory irritation

2.2. Label elements

According to Regulation (EC) 12/27/2008

Contains Portland Cement Clinker EC: 266-043-4; CAS: 65997-15-1

Hazard Pictogramms



Signal word

Danger

H318 Causes serious eye damage
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation

GHS Precautionary statements

P102: Keep out of reach of children.
P262 Do not get in eyes, on skin, or on clothing
P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventillated area
P280 (H315 and 319) Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Immediately call a POISON CENTER or doctor/physician.
P302 + P352 + P333 + P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
P261 + P304 + P340 + P312: Avoid breathing dust/fume/gas/mist/vapours/spray. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
P501 Dispose of contents/container according to local/regional/national level. Precaution.

2.3 Other hazards

The product does not meet the criteria for PBT and vPvB in accordance with Annex XIII of REACH (Regulation (EC) 1907/2006).

The product can irritate the eyes, the mucous membranes, the throat and the respiratory system and cause coughing. Frequent inhalation of the powder for a long period of time increases the risk of onset of lung diseases. The repeated and prolonged contact with the mixture onto the skin can cause irritation and dermatitis. In case of prolonged contact of the dust and the paste with the skin can cause sensitization. Significant ingestion may cause ulceration of the digestive tract.

Fresh mortar (with added water) may corrode objects made of aluminium or other non-noble metals.

The product contains chromate reducing agent. As a result, the content of soluble chromium (VI) is less than 2 ppm. 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 (H317)

Under normal conditions of use, the product and its mixture does not present any particular risk to the environment and is subject to compliance with the recommendations contained in paragraphs 6, 8, 12 and 13.

3. Composition/information on ingredients

3.1 Substances

Not applicable. The product is a mixture of cement and EPS beads.

3.2 Mixtures

The mixture contains the following substances which may cause harm to health according to Regulation (EC) 1272/2008.

Substance	EINECS	N. CAS	REACH registration number	Concentration	Classification according to regulation (EC) 1272/2008		
					Hazard classification	Hazard category	Hazard phrases
Clinker	266-043-4	65997-15-1	Exempted from registration	90-95%	Specific target organ toxicity / single exposure / respiratory tract irritation	3	H335
					Skin irritation	2	H315
					Serious eye damage / eye irritation	1	H318
					Skin sensitization	1B	H317
Flue dust	270-659-9	68475-76-3	01-2119486767-17-0071	<4,75%	Skin irritation	2	H315
					Skin sensitization	1	H317
					Serious eye damage / eye irritation	1	H318
					Specific target organ toxicity (single exposure) respiratory tract irritation	3	H335
FeSO ₄	7720-78-7	231-753-5	01-2119513203-17-xxxx	<4.75%	Harmful to health if swallowed, 4 (extremely toxic)	4	H302
					Skin irritation	2	H315
					Serious eye damage / eye irritation	2	H319
Pentane	203-692-4	109-66-0	01-2119459286-30-XXXX	< 0,1%	Flam. liq	2	H225

Hexavalent chromium content <2 ppm.

The product is not subject to the REACH registration.

4. First-aid measures

4.1 Description of first aid measures

General information

It should be noted that the administration of drugs and the use of medical equipment must be carried out under the supervision of medical staff. Also, note that in case of an accident, the first service must be performed by trained personnel in order to avoid further complications or damage.

There is no need for personal protective equipment for the rescuers who need to avoid inhalation of dust and avoid contact with the product when this is wet or muddy. If this is not possible, they must use the personal protective equipment described in section 8.

In case of contact with eyes

Do not rub your eyes to prevent corneal damage caused by the rubbing. Make sure the patient does not wear contact lenses and if he does, immediately remove them and proceed with the eyewash. Wash immediately with plenty of water for at least 20 minutes to remove all residues.

Immediately seek examination and/or advice by an eye doctor.

In case of contact with skin

In case of contact with skin, wash the affected area with plenty of water and pH neutral soap or suitable mild detergent. Remove the contaminated clothing and clean thoroughly before reuse. In all cases of irritation or burns, consult a physician.

In case of inhalation

Move the person to fresh air; dust in the person's throat and nostrils should be eliminated naturally. Contact a physician if irritation persists, or if it occurs later, or if you are having trouble, coughing or the symptoms persist atria.

In case of ingestion

Do not induce vomiting. If the person is conscious, rinse mouth with plenty of water and seek immediate medical attention or contact a poison control center.

4.2 Most important symptoms and effects, both acute and delayed**Eyes**

Contact with eyes may cause irritation or serious and potentially irreversible injury.

Skin

After a prolonged contact with the skin (due to perspiration or moisture) it can have an irritating effect or may cause dermatitis after repeated and prolonged contact. In addition, prolonged skin contact with the preparation can cause irritation, dermatitis or serious burns.

Inhalation

Repeated inhalation of the powder for a long period of time increases the risk of onset of lung diseases.

Ingestion

Accidental ingestion may cause ulceration of the mouth and esophagus.

Environment

In normal use (see section 1) and storage, the product is not dangerous for the environment.

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

See 4.1: Deliver the present Safety Data Sheet.

5. Fire-fighting measures

The preparation is non-combustible, non-flammable and non-explosive

5.1 Extinguishing media**Suitable extinguishing media:**

Water, CO₂, foam, chemical powders, according to the materials involved in the fire.

Information about suitable extinguishing media:

Not relevant

Unsuitable extinguishing media:

None in particular

Indicate whether any extinguishing media is inappropriate for a particular situation involving the substance/mixture:

None in particular

5.2 Special hazards arising from the substance or mixture

None in particular

5.3 Advice for firefighters

None in particular

6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from the area of people not involved in the intervention of the emergency.

Use a mask, goggles, gloves and the appropriate personal protective equipment (see section 8).

In case of accidental dispersion, provide adequate respiratory protection and enable adequate ventilation.

Avoid prolonged contact with skin and eyes. Do not breathe dust.

6.1.1 For non-emergency personnel

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

6.1.2 For emergency responders

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

6.2 Environmental procedures

Limit any leakage by using earth or sand. Do not allow the mixture to disperse into waterways or sewers. Rapidly collect the product only by using appropriate protective equipment. Contain the spillage and collect it mechanically. Avoid any release of the product to the environment and to raise excessive dust. After collecting the spillage, wash the area and the materials involved in the collection with water.

6.3 Methods for cleaning up

Dry product

Use collection methods that do not cause dispersion and suspension of dust, such as portable industrial vacuum cleaners with high efficiency filters (EPA and HEPA filters according to EN 1822-1: 2009). Do not use compressed air. Alternatively, wipe the dust with a suitable instrument (eg a mop). You can also spray water at low pressure (as not to disturb the dust) and collect the pulp. If the collection is not possible, remove the slurry with water (see liquid product).

If it is not possible to clean with the above methods and only dry clean up is possible, make sure the staff concerned with the clean up carries wears the appropriate respiratory protection and try to limit the dispersion of the dust. Avoid inhalation of dust and contact with skin. Place the soiled items into a suitable container and allow the mixture to solidify before disposal, as described in Chapter 13 of this SDS.

Liquid product

Collect the liquid product and place it in a suitable container. Allow the mixture to solidify and dispose as described in Chapter 13 of this SDS

6.4 Reference to other sections

Wherever it's appropriate, see sections 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

7.1.1 Recommendations

Avoid any contact with the eyes and the skin. Avoid prolonged exposure to any dust.

Use personal protective equipment as described in section 8. When using the product in closed spaces, take care for adequate ventilation by mechanical means if natural means are not sufficient.

7.1.2 Advice on general occupational hygiene

Do not eat, drink or smoke while using the mixture. Wash thoroughly after using the product. Remove contaminated clothing and personal protective equipment prior to entering food consuming areas.

7.2 Conditions for safe storage, including any incompatibilities

Keep the product away from water and/or moist environments.

Store the product intact and tightly closed in its original packaging.

Store the product in a dry, well ventilated area away from any sources of heat and away from direct sunlight.

Keep the preparation out of the reach of children.

Store it away from food, beverages and animal food.

Do not use aluminium containers for mixing and transporting the product. Fresh mortar may corrode aluminium and other non-noble metals.

See also section 10.

7.3 Specific end use(s)

None

8. Exposure controls/personal protection

8.1 Control parameters

According to the Greek legislation (PD 77/93) the OELN for dust is 10mg/m³ for the total inhalable dust and 5mg/m³ for respirable dust,

Exposure Limit Values of substances

Clinker

DNEL respirable fraction: 1mg/m³

DNEL skin: N.A.

DNEL ingestion: not relevant

TLV-TWA (ACGIH) 1 mg/m³

Pentane

TWA: 600 ppm

MAK: 1000 ppm 3000 mg/m³

8.2 Exposure controls

8.2.1 Appropriate engineering controls

The work area must be sufficiently ventilated. If necessary, install appropriate local ventilation systems or ensure an effective and sufficient air exchange.

8.2.2 Individual protection measures, such as personal protective equipment

(a) Eye/face protection



When handling the product, wear safety glasses or masks certified according to EN 166, to prevent any contact with the eyes. Do not wear contact lenses.

(b) Skin protection



Wear shoes and/or safety boots and work clothing (long sleeves and trousers) as well as products for skin care (including moisturizers) to ensure maximum dermal protection when in contact with wet mixture.

(1) Hand protection



Use protective clothes, tight, resistant to abrasion and alkalis, certified according to EN 374 – parts 1, 2, 3.

(c) Respiratory protection



In case a worker may be exposed to a concentration of respirable matter greater than the exposure limit, he must use appropriate respiratory protection devices, such as filtering face pieces (FFP) certified according to EN 149 or quarter masks certified according to EN 140, EN 14387 and EN 1827.

(d) Thermal hazards

Not applicable.

8.2.3 Environmental exposure control

The mixture contains cement. Do not discharge the product in the sewer or on other water resources, to avoid pH increase. The increase of pH above 9 has possible eco-toxicological effects.

For dust exposure to the environment, no special circumstances are needed. Collect the dust according to the information contained in chapter 6.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance	Solid powder of cement and EPS beads
(b) Odour	Odorless
(c) Odour threshold	Not applicable
(d) pH	In aqueous solutions (e.g. fress mortar) it is alkaline, like all cement products. The pH range may vary between 10-13 depending on the water quantity.
(e) Melting point/ Freezing point	Not available
(f) Initial boiling point and boiling range (at atmospheric pressure)	Not available
(g) Flash point	Not available
(h) Evaporation rate	Not available
(i) Flammability (solid, gas)	Not applicable
(j) Upper/lower flammability or explosive limits	Not applicable
(k) Vapour pressure	Not applicable
(l) Vapour density	Not available

(m) Relative density	300 kg/m ³
(n) Solubility(ies)	In water: Forms saturated solutions of calcium hydrate In fat and/or organic solvents: Soluble
(o) Partition coefficient: n-octanol/water	Not applicable for cement. EPS beads soluble.
(p) Auto-ignition temperature	Not available
(q) Decomposition temperature	> 80-100°C
(r) Viscosity	Not available
(s) Explosive properties	Not available
(t) Oxidizing temperatures	Not available

9.2 Other information

Not Available

10. Stability and reactivity

10.1 Reactivity

When mixed with water, the product hardens forming a stable mass that does not react with the environment. The dry product is chemically stable for the storage and handling conditions described in section 7.

10.2 Chemical stability

Stable under normal conditions. The mixture contains cement and EPS. It is stable if it is stored properly (see chapter 7) and compatible with most building materials. Avoid contact with incompatible materials. The mixed product is alkaline and is incompatible with acids, ammonium salts, with aluminium and other non-noble metals. Cement is soluble in hydrofluoric acid creating corrosive Silicon tetrafluoride in gas form. Cement reacts with water forming silicate salts and calcium hydroxide. Silicate salts in cement react with strong oxidizers such as fluorine, Boron trifluoride, Chlorium trifluoride, manganese trifluoride and oxygen difluoride.

10.3 Possibility of hazardous reactions

Not applicable for intended uses

10.4 Conditions to avoid

The presence of moisture and irradiation during storage may result in loss of quality of the product and the formation of lumps (or blocks), with consequent difficulties in handling and use.

10.5 Incompatible materials

Contact with acids, ammonium salts, aluminium or other non-noble metals may cause exothermic reactions (temperature rise)

10.6 Hazardous decomposition products

None

11. Toxicological information

11.1 Information on toxicological effects

There are no toxicological data available on the mixture.

In assessing the toxicological effects deriving from the preparation, take in consideration the concentration of each substance.

Experimental studies have not been performed on the preparation itself. Therefore, for the aspect of toxicity to humans one must evaluate the individual hazardous substances that make up the preparation and are set out in paragraph 3 of this data sheet.

Below, the toxicological information relating to the main substances of the mixture:

(a) acute toxicity (oral, dermal and inhalation)

This product contains cement. For cement the classification criteria are not met,

Acute toxicity dermal (Report 2)

Limit test, rabbit, 24 hours contact, 2,000 mg/kg body weight – no lethality. Based on available data, the classification criteria are not met.

Acute toxicity oral

No indication of oral toxicity from studies with cement kiln dust. Based on available data, the classification criteria are not met.

Acute toxicity inhalation (Report 5)

No acute toxicity by inhalation observed. Based on available data, the classification criteria are not met

(b) Skin corrosion / irritation – Category 2 (Report 2)

Cement in contact with wet skin may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion may cause severe burns. Some individuals may develop eczema upon exposure to wet cement dust caused by the high pH which induces irritant contact dermatitis after prolonged contact.

(c) Serious eye damage / irritation – Category 1 (Report 6 and 12)

Portland cement clinker caused a mixed picture of corneal effects and the calculated irritation index was 128. Direct contact with cement may cause corneal damage by mechanical stress, immediate or delayed irritation or inflammation. Direct contact by larger amounts of dry cement or splashes of wet cement may cause effects ranging from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns and blindness.

(d) Respiratory or skin sensitization**Respiratory sensitization (Report 1)**

There is no indication of sensitization of the respiratory system. Based on available data, the classification criteria are not met.

Skin sensitization – Category 1B (Report 3, 4 and 12)

The product contains cement. Some individuals may develop eczema upon exposure to wet cement 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 cement contains a soluble Cr (VI) reducing agent and if the mentioned period of effectiveness of the chromate reduction is not exceeded, an allergic sensitising effect is not expected (Report 3).

(e) Germ cell mutagenicity (Report 8 and 9)

It is believed that the mixture does not have any potential or any proven mutagenicity effects to humans.

(f) Carcinogenicity (Report 1 and 10)

It is believed that the mixture does not have any potential or any proven carcinogenic effects to humans. In more detail, the product contains cement. No causal association has been established between Portland cement exposure and cancer. The epidemiological literature does not support the designation of Portland cement as a suspected human carcinogen. Portland cement is not classifiable as a human carcinogen (According to ACGIH A4: Agents that cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity that are sufficient to classify the agent with one of the other notations.). Based on available data, the classification criteria are not met.

(g) Reproductive toxicity

It is believed that the mixture does not have any potential or any proven effects of reproductive toxicity.

(h) STOT – Single exposure – Category 3 (Report 1)

The product contains cement. Cement dust may irritate the throat and respiratory tract. Coughing, sneezing, and shortness of breath may occur following exposures more than the occupational exposure limits. Overall, the pattern of evidence clearly indicates that occupational exposure to cement dust has produced deficits in respiratory function. However, evidence available at the present time is insufficient to establish with any confidence the dose-response relationship for these effects.

(i) STOT – Repeated exposure (Report 11)

The product contains cement. There is an indication of COPD. The effects are acute and due to high exposures. No chronic effects or effects at low concentration have been observed. Based on available data, the classification criteria are not met.

(j) Aspiration hazard

Not applicable since the product is not used as an aerosol.

11.1.12 Other information

The mixture contains cement. Inhaling cement dust may aggravate existing respiratory system disease(s) and/or medical conditions such as emphysema or asthma and/or existing skin and/or eye conditions.

12. Ecological information**12.1 Toxicity**

There are no eco toxicological data on the mixture itself.
The product is not dangerous for the environment.
There are no indications of toxicity in the sediment phase.

In case of dispersion of large quantities of the product in the water, due to the consequent increase in the pH value, there are possible eco-toxicity effects for the aquatic life under certain circumstances.

12.2 Persistence and degradability

Not relevant. After use, the product does not pose a risk for toxicity.

12.3 Bioaccumulative potential

Not relevant. After curing, the product does not pose a risk for toxicity.

12.4 Mobility in soil

Not relevant. After curing, the product does not pose a risk for toxicity.

12.5 Results of PBT and vPvB assessment

Not relevant. After curing, the product does not pose a risk for toxicity.

12.6 Other adverse effects

Not relevant.

13. Disposal considerations**13.1 Waste treatment methods**

In case of accidental spill, the aspects in chapter 6 and 7 are valid. Do not dispose of into sewage systems or surface waters.

Product – Product that has exceeded its shelf life.

EWC number: 10 13 99 (wastes not otherwise specified).

The product contains cement. When the product exceeds its shelf life (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 number: 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

EWC numbers: 10 13 14 (waste from manufacturing of cement – waste concrete or concrete sludge) or 17 01 01 (construction and demolition wastes - concrete). 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 inertization, concrete waste is not a dangerous waste

Packaging

EWC number: 15 01 01 (waste paper and cardboard packaging). Completely empty the packaging and process it according to local legislation.

14. Transport information**Transport hazard by road – ADR NO**

The product does not fall within any class of hazard for the transportation of dangerous goods. Therefore, it is not subjected to model regulations: IMDG [sea], ADR [road], RID [rail], ICAO/IATA [air].

During transportation, avoid the dispersion of the product by the wind. Store the product in close containers.

14.1 UN number

Not relevant

14.2 UN proper shipping name

Not relevant

14.3 Transport hazard class(es)

Not relevant

14.4 Packing group

Not available

14.5 Environmental hazards

Not relevant

14.6 Special precautions for user

Not relevant

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not relevant

15. Regulatory information**15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture**

Regulation (EC) No 830/2015 of 28/05/2015

Regulation (EC) No 1907/2006 of 18/12/2006

Regulation (EC) No 987/2008 of 09/10/2008

Corrigendum to Commission Regulation (EC) No. 987/2008 of 08/10/2008

Directive 2003/53/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2003

Regulation (EC) No. 552/2009 of 22/06/2009

Regulation (EC) No. 1272/2008 of 16/12/2008

Regulation (EU) No. 453/2010 of 20/05/2010

Requirements of Regulation (EC) No. 1907/2006 "REACH"

15.2 Chemical safety assessment

There was no evaluation on safety.

General Information

The preparation, when mixed with water, contains less than 0,0002% of soluble hexavalent chromium Cr(VI) of the total dry weight, according to the Directive 2001/60/EC.

The product is a mixture and as such is exempted from REACH registration. Cement clinker is exempted from REACH registration (Art 2.7 (b) and Annex V.10 of REACH). The marketing and use of cement (and cement products) are subject to a restriction on the content of soluble Cr (VI) (REACH Annex XVII point 47 Chromium VI compounds).

The list of references to legislations is indicative and not exhaustive. The user of the product is required to investigate in each case the regulations and recommendations relating to the proper use of the product.

16. Other information**16.1 Modifications on previous versions**

Revision date: 16/11/2021.

Changes from previous version: Changes in composition of mixture. Changes relating to waste management (section 13). More detailed toxicological information (section 11).

16.2 Abbreviations and acronyms

ADR: Accord européen relative au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]

ACGIH: American Conference of Governmental Industrial Hygienists

CLP: Classification, Labelling and Packaging

DNEL : Derived no effect level

IBC: International Bulk Chemical code

ICAO/IATA: International Civil Aviation Organization / International Air Transport Association

IMDG: International Maritime Dangerous Goods code

MAK: Maximum workplace concentration

MARPOL: International Convention for the Prevention of Pollution from Ships

OELV: Occupational Exposure Limit Values

REACH: Registration, Evaluation, Authorization, and restriction of Chemicals

RID: Rail International Transport

TWA: Time-Weighted Average concentrations of airborne substances

TLV: Threshold limit value

16.3 Sources of data

- (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) TNO report V8801/02, An acute (4-hour) inhalation toxicity study with Portland Cement Clinker CLP/GHS 03-2010-fine in rats, August 2010.
- (6) TNO report V8815/09, Evaluation of eye irritation potential of cement clinker G in vitro using the isolated chicken eye test, April 2010.
- (7) TNO report V8815/10, Evaluation of eye irritation potential of cement clinker W in vitro using the isolated chicken eye test, April 2010.
- (8) 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.
- (9) Cytotoxicity and genotoxicity of cement dusts in A549 human epithelial lung cells in vitro; Gminski et al, Abstract DGPT conference Mainz, 2008.
- (10) 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.
- (11) Prospective monitoring of exposure and lung function among cement workers, Interim report of the study after the data collection of Phase I-II 2006-2010, Hilde Notø, Helge Kjuus, Marit Skogstad and Karl-Christian Nordby, National Institute of Occupational Health, Oslo, Norway, March 2010.
- (12) Occurrence of allergic contact dermatitis caused by chromium in cement. A review of epidemiological investigations, Kåre Lervik, Helge Kjuus, NIOH, Oslo, December 2011.

16.4 Procedure that was followed for the classification of the product according to Article 9 of Regulation 1272/2008 (CLP)

No experiments have taken place on the product. The information regarding the classification of the product, as presented in chapter 2.1 of the present SDS, is based on the classification of its constituents, according to the Directive 1999/45/EC (DPD) or 1999/45/EC (DSD).

16.6 Advice for Staff training

No special training is needed for the stuff that uses this product. Everyone must be fully informed on all the necessary procedures (regular and exceptional) and the safety measures as been described in the present SDS. Those procedures and those measures must be followed every time someone uses this product.

Disclaimer: The information contained herein is based on the best knowledge of the compiler of the SDS on the date indicated in the introduction and are presented here in good will and are based on information given to our company by the producers of the constituents of the product as described in their SDS. This information will be updated as soon as we receive new information. That information is intended and solely related only to the product indicated. Therefore, the information may not be relevant in case of combinations or mixtures thereof. Any other use of the product is solely the responsibility of the user; therefore the user must comply with the current regulations and make sure of the suitability and completeness of the information contained in this SDS; in relation to the specific use that must be made for the product.

TEKTO HELLAS S.A. provides this SDS in good faith and does not express any implied warranty as to its completeness and accuracy. The purpose of this SDS is to be used as a guide for taking appropriate precautions during the handling of the material by a properly trained person. Individuals who receive this information must use their own judgment to determine the suitability for each application or purpose. Additionally, the present SDS (including Annex) has been prepared under the requirements of Regulation (EC) 453/2014, based on information available at the indicated date. Additional information obtained in accordance with the timetable as set out in REACH and the relevant Directives (as described in the application programs of REACH) will be added as soon as they become available.