

MATERIAL SAFETY DATA

EDITION: 5 DATE: March 2014

1. Identification of the substance/mixture and of the company/undertaking

<u>1.1 Product identifier:</u> weber.cem lightweight

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

A lightweight mortar for construction applications.

1.3 Details of the supplier of the safety data sheet:

Weber

Saint-Gobain Weber Limited Dickens House Enterprise Way Flitwick Bedford. MK45 5BY.

1.4 Emergency Telephone Number: +44 8703 330070

2. Hazards identification

2.1 Classification of substance or mixture

Xi R37/38, R41, R43

2.2 Label elements:



Xi (Irritant)

Contains: Contains chromium (VI). May produce an allergic reaction.

R Phrases:				
R37/38	Irritating to respiratory system and skin			
R41	Risk of serious damage to the eyes			
R43	May cause sensitisation by skin contact			
S Phrases:				
S24	Avoid contact with skin			
S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.			
S28:	After contact with skin, wash immediately with plenty of soap and water.			

S37/38/39: Wear suitable protective clothing, gloves and eye/face protection.

S61 Avoid release to the environment. Refer to special instructions/safety data sheet

Inhalation: Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of developing lung diseases.

Eyes: Eye contact with the dry powder or wet product may cause serious and potentially irreversible injuries.

Skin: Strong alkaline solutions in contact with the skin tend to damage the nerve endings first before damaging the skin, therefore chemical burns can develop without pain being felt at the time. Hence, prolonged skin contact with wet product may cause serious burns.

This product may, until set, cause irritant dermatitis: Irritant contact dermatitis is due to a combination of the wetness, alkalinity and abrasiveness of the constituent materials. If used outside of the declared shelf life, there may be a risk of allergic dermatitis. Allergic dermatitis is caused mainly by the sensitivity of an individual's skin to soluble chromium (VI).

3. Composition/Information on ingredients

<u>3.2 Preparation:</u> A blend of Portland cement, silica sands and small quantities of other additives.

Components:

Substance	Content	CAS No.	Classification
Portland Cement		65997-15-1	Xi, R37, R38, R41, R43

4. First aid measures

4.1 Description of first aid measures:

- SKIN CONTACT: Wash the affected area thoroughly with soap and water. If irritation pain or other skin trouble occurs, seek medical advice. Clothing contaminated with wet product should be removed and washed thoroughly before reuse.
- EYE CONTACT: Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.
- INHALATION: Move affected person to fresh air. If nose or airways become inflamed seek medical attention.
- INGESTION: If swallowing has occurred do not induce vomiting. Give person plenty of water to drink. Seek medical attention.

<u>4.2 Most important symptoms and effects, both acute and delayed</u> Prolonged skin contact with wet product may cause serious burns or contact dermatitis. If used outside of the declared shelf life allergic dermatitis may be caused.

<u>4.3 Indication of any immediate medical attention and special treatment needed</u> No further relevant information available.

5. Fire-fighting measures

5.1 Extinguishing media:

Suitable Extinguishers: Water mist, Carbon dioxide, Foam and Dry powder.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Do not release contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Avoid breathing dust. Wear protective clothing (waterproof and alkali resistant) and eye or face protection.

6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.

<u>6.3 Methods and material for containment and cleaning up:</u> Recover spillage in dry state if possible. Minimise generation of airborne dust. The product can be slurried with water but this must be contained. Keep children away from clean-up operations.

Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

7. Handling and storage

7.1 Precautions for safe handling

When handling bags of this product due regard should be paid to Manual Handling Operations Regulations. Some bags may have a small amount of cement dust on their outer surface. Appropriate personal protection should be used whilst handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in unopened bags in clean dry conditions, off the ground, above 5°C.

Control of soluble Chromium (VI)

This product is treated with a Cr (VI) reducing agent according to the chromium (VI) directive (2003/53/EC), the effectiveness of the reducing agent diminishes with time. Therefore product bags will contain information on the period of time (shelf life) for which the reducing agent will continue to maintain the level of soluble Cr (VI) below the imposed limit of 0.0002%, according to EN 197-10. They will also indicate the appropriate storage conditions for maintaining the effectiveness of the reducing agent.

7.3 Specific end use(s):

Refer to the technical data sheet for conditions of use.

8. Exposure controls/personal protection

8.1 Control parameters:

Workplace Exposure Limit (WEL) 8 hour TWA (According to EH40/05):

Total inhalable dust Respirable dust 10.0 mg/m³ 4.0 mg/m³

8.2 Exposure controls:

Technical Protective Measures

No special measures required

Respiratory Protection

Suitable respiratory protection should be worn to ensure that personal WEL is not exceeded. Where there is a risk of exposure to dust from powder product wear a particulate respirator according to EN149 FFP 2S/3S.

Hand Protection

Wear suitable gloves: these should be waterproof, abrasion and alkali resistant

Eye Protection

Dust-proof goggles should be worn wherever there is a risk of dry powder product or wet product entering the eye. This should conform to EN 166.

Skin Protection

Waterproof clothing gloves and boots should be worn which ensure that the dry powder product or wet product, does not come into contact with the skin. In some circumstances such as when applying product, waterproof trousers and wellingtons may be necessary.

Particular care should be taken to ensure that wet product does not enter the boots and persons do not kneel on the wet product so as to bring the wet product into contact with unprotected skin. Should wet product get inside boots, gloves or other protective clothing then this protective clothing should be immediately removed and the skin thoroughly washed as well as the protective clothing/footwear.

Do not eat, drink or smoke when working with this product to avoid contact with the skin or mouth.

Immediately after working with this material, workers should wash, shower or use skin moisturisers. Remove contaminated clothing, footwear, watches etc. and clean thoroughly before re-using them.

9. Physical and chemical properties

Physical state:ParticulateParticle size:5 - 2000 micronspH:pH of wet cement 12 - 14

10. Stability and reactivity

10.1 Reactivity:

This product is stable under normal conditions of storage and use.

10.2 Chemical stability:

Thermal decomposition: no decomposition if used as instructed.

<u>10.3 Possibility of hazardous reactions:</u> No hazardous reactions known.

10.4 Conditions to avoid:

Bags of powder will set solid if soaked with water. No further relevant information available.

<u>10.5 Incompatible materials:</u> No further relevant information available.

<u>10.6 Hazardous decomposition products:</u> No hazardous thermal decomposition products released.

11. Toxicological information

11.1 Short term effects

a) Eye contact – cement is a severe eye irritant. Mild exposure can cause soreness. Gross exposures or untreated mild exposures can lead to chemical burning and ulceration of the eye

b) Skin contact – cement powder or any cement/ water mixture may cause chemical burns and/or irritant contact dermatitis. If used outside of the declared shelf life, there may be risk of allergic dermatitis.

c) Acute dermal toxicity: Acute dermal toxicity (cement): limit test, rabbit, 24 hours contact, 2.000 mg/kg body weight – no lethality [Reference (2)].

d) Ingestion – the swallowing of small amounts of cement or any cement/water mixtures is unlikely to cause any significant reaction. Larger doses may result in irritation to the gastrointestinal tract.

e) Inhalation – cement powder may cause inflammation of mucous membranes. Coughing, sneezing and shortness of breath may occur following exposures in excess of occupational exposure limits.

11.2 Chronic effects

a) Inhalation – Chronic exposure to respirable dust in excess of occupational exposure limits may cause coughing, shortness of breath and may cause chronic obstructive lung disease (COPD)

b) Carcinogenicity – a casual association between cement exposure and cancer has not been established [reference (1)].

c) Contact dermatitis/Sensitising effects – Some individuals may exhibit eczema upon exposure to wet cement caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis [Reference (4)].

The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of those two mechanisms. An exact diagnosis is often difficult. If the cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness is not exceeded, a sensitising effect is not expected [Reference (3)].

11.3 Medical conditions aggravated by exposure

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 Ecotoxicity

The product is not expected to be hazardous to the environment (LC50 aquatic toxicity rating not determined). The addition of this product to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

12.2 Mobility

Dry product is not volatile but might become airborne during handling operations.

<u>12.3 Persistence and degradability/Bio-accumulative potential/results of PBT</u> <u>assessment/other adverse effects</u> Not relevant. After hardening, this product presents no toxicity risks.

13. Disposal considerations

<u>13.1 Product – unused residue or dry spillage</u> Pick up dry. Mark the containers. Harden with water and dispose according to 13.4.

13.3 Product - slurries

Allow to harden, avoid entry in sewage and drainage systems or into bodies of water (e.g. streams) and dispose of as indicated in 13.4.

<u>13.4 Product – after addition of water, hardened</u> Dispose of according to the current local regulations. Avoid entry into the sewage water system.

14. Transport information

Classification for transport not required

15. Regulatory Information

<u>15.1 Safety, health and environmental regulations/legislation specific for the substance/mixture:</u> No further information available

<u>15.2 Chemical safety assessment:</u> No specific information available.

16. Other information

References

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

(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).

(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.