Product Safety Data Sheet

Ready bagged mortars

1. Post-Fast
2. Slab-Fast
3. Quality Brick Laying Mortar
4. Self Levelling Floor Compound

1. Identification of Substance

An odourless white to grey powder, mainly insoluble in water. When water is added it becomes a binder for construction applications. It is stored on site in bulk silos.

2. Supplier

The material is imported and distributed by:
Dragon Alfa Cement Ltd
The Cement Terminal
Sharpness Docks
Gloucestershire
GL13 9UX
Tel: 01453 811587
Fax: 01453 811953
Web: www.dragonalfacement.com

3. Composition/Information on Ingredients

The principle constituents of these cements are calcium silicates, aluminates, ferro-aluminates and sulphates. Trace quantities of gypsum and chromium compounds are also present. The partly soluble ingredients, when mixed with water give rise to a potentially hazardous solution. Hexavalent chromium salts in the material are soluble and when mixed with water will give rise to a hazardous solution.

4. Hazard Identification

Cement dust has been identified as an irritant. Direct contact may irritate the skin , eyes, respiratory system and gastrointestinal tract. When cement is mixed with water it produces a highly alkaline solution (PH12) if it comes into contact with eyes or skin it may cause serious burns and ulceration, the eyes are particularly vulnerable and damage will increase with contact time. Strong alkali 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. Cement mortar and concrete mixes may, until hardened, cause both irritant and allergic contact dermatitis.

First Aid Measures

Eye Contact
Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.

Skin Contact
Wash the affected area thoroughly with soap and water, if irritation, pain or other skin problems occur, seek medical advice immediately. Clothing contaminated by wet cement, concrete or mortar should be removed and washed thoroughly before further use.

Ingestion
Do not induce vomiting. Wash out the mouth with clean water and give plenty of water to drink. Seek medical advice if discomfort continues.

Inhalation
If irritation occurs move to fresh air, if nose or airways become inflamed seek medical advice.

5. Fire Fighting Measures

Cement is not flammable and will not facilitate combustion with other materials.

6. Accidental Realise Measures

For personal precautions see section 9

Cleaning Up
If possible recover any spillage in the dry state, minimise airborne dust. The product can be slurried by the addition of water but will subsequently set as a hard material.

7. Handling and Storage

Bulk cement should only be stored in silos specifically constructed for cement storage. These silos should be equipped with dust extraction filters, bulk cement should only be handled by mechanical methods.

Bagged cement should be stacked safely and any stacks should be constructed in a suitable manner. Any pallet used to store bagged cement should be sound and capable of supporting the weight of the load.

Bagged cement may have cement on its outer surface, when manually handling cement bags suitable gloves and overalls should be worn. If there is the possibility of cement dust entering the eye then protective dust proof goggles should also be worn. If there is the possibility of dust concentrations exceeding the Occupational Exposure Limit (5mg/m3 8hr TWA) then suitable respiratory equipment should be used.

The handling of cement bags is subject to the Manual Handling Operations Regulations 1992. The risks outlined in these regulations should be considered.

8. Exposure Controls/Personal Protection

Occupation Exposure Standard (OES)
OES 8hr Time Weighted Average (TWA) – EH40/97
10mg/m3 total inhalable dust
4mg/m3 respirable dust

Engineering measures
Where reasonably practicable dust exposure should be controlled by engineering methods.

Personal Protective Equipment (PPE)

Respiratory Protection
Suitable respiratory protection should be worn to ensure that personal exposure is less than the OES.

Hand & Skin Protection
Protective clothing should be worn which ensures cement or any cement /water mixture does not come in contact with the skin. In some circumstances such as when laying concrete waterproof trousers and Wellingtons may be necessary. Particular care should be taken to ensure that wet concrete does not enter the boots and persons do not kneel on the wet concrete so as to bring the wet concrete into contact with the unprotected skin.

Should wet concrete enter the inside of the boots or other PPE then this PPE should be immediately removed and the skin thoroughly washed as well as the contaminated clothing and footwear.

Eye Protection
Dust proof goggles should be worn whenever there is a risk of cement powder entering the eyes.

9. Physical/Chemical Properties

Physical Data

Physical state	-	Particulate
Mean particle size	-	5-30 micron
Odour	-	Not applicable
PH (wet cement)	-	12-14
Viscosity	-	N/A
Freezing Point	-	N/A
Boiling Point	-	N/A
Melting Point	-	N/A
Flash Point	-	N/A

Explosive properties	-	Not explosive
Density	-	2800-3200kg/m3
Solubility	-	N/A

Chemical compounds

Mainly a mixture of	-	3Ca0 – Si02
	-	2Ca0 – Si02
	-	3Cao – Ai203
	-	2Cao – Ai203 – Fe203
	-	CaS04

Contains less than 1% crystalline silica

10. Stability and Reactivity

There are no conditions contributing to chemical instability.
There are no decomposition products.
There are no special precautions necessary to prevent an unstable reaction.

11. Toxicological Information

Short term

Eye contact
Cement is a severe eye irritant. Mild exposure can cause soreness. Gross exposure can lead to chemical burns and ulceration of the eye.

Skin
Cement powder or any cement/water mixture may cause irritant contact dermatitis, allergic (chromium) dermatitis and/or chemical burns.

Ingestion
The swallowing of small amounts of cement or any cement/water mixture is unlikely to cause any significant reaction. Larger doses may cause irritation of gastro-intestinal tract.

Inhalation
Cement powder may cause inflammation of the mucas membranes.

Long term (Chronic) effects

High repeated exposure in excess of the OES, have been linked with rhinitis and coughing.

Skin exposure has been linked to allergic (chromium) dermatitis. Allergic dermatitis more commonly arises through contact with cement/water mixtures than dry cement.

12. Ecological Information – Aquatic Toxicity Rating

LC aquatic toxicity rating not determined. The addition of cements to water will however cause the PH to rise and may therefore be toxic to aquatic life in some circumstances.

Biological Oxygen Demand (BOD)
Not applicable

13. Disposal Considerations

Dispose of surplus cement at an authorised waste site in line with the duty of care required under environmental legislation.

14. Transport

Classification for conveyance – Not required

15. Regulatory Information

This data sheet does not constitute an assessment as required under the Control of Substances Hazardous to Health Regulations 1994 (CoSHH)

The information it contains however will assist the user in carrying out such an assessment.

Chemicals (Hazard Information and packaging and supply)
Regulations 1996. Classification – Irritant

Risk Phrases

R26/37/38:	Irritating to eyes, respiratory system and skin.

Safety Phrases

S1:	Keep out of reach of children
S24/25:	Avoid contact with skin and eyes
S26:	In case of contact with eyes, rinse wit plenty of water and seek medical advice immediately.
S36/37/39:	Wear suitable protective clothing, gloves and eye protection.

16. Legislation and other information

CONIAC Health and Safety Information Sheet No 26 (cement).
Health and Safety Work Act 1974.
Control of Substances Hazardous to Health Regulation 1994.
HSE Guidance note EH40/97 – (Occupational Exposure Limits 1997).
HSE Publication INDG 233 – (Preventing dermatitis out of work).