



## SAFETY DATA SHEET BAL FLEX ONE

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

#### 1.1. Product identifier

Product name BAL FLEX ONE

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

Identified uses Cement based adhesive.

Uses advised against No specific uses advised against are identified.

#### 1.3. Details of the supplier of the safety data sheet

Supplier Building Adhesives Ltd  
Longton Road,  
Trentham,  
Stoke on Trent  
ST4 8JB

01782 591100

Contact person sdsreply@building-adhesives.com

#### 1.4. Emergency telephone number

Emergency telephone 01865 407 333 (24hr)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Not Classified

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

Environmental hazards Not Classified

#### Human health

When the cement based powder is mixed with water or admixture, a strongly alkaline paste is produced. Cement based products may, until set, cause both irritant and allergic contact dermatitis. Irritant contact dermatitis is due to a combination of the wetness, alkalinity and abrasiveness of the constituent materials. Allergic contact dermatitis is caused mainly by the sensitivity of the individual's skin to hexavalent chromium salts. Corrosive. Prolonged contact causes serious eye and tissue damage.

#### Environmental

The product is not expected to be hazardous to the environment.

#### 2.2. Label elements

##### Hazard pictograms



Signal word

Danger

## BAL FLEX ONE

<b>Hazard statements</b>	H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
<b>Precautionary statements</b>	P102 Keep out of reach of children. P261 Avoid breathing dust. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with local regulations.
<b>Contains</b>	ORDINARY PORTLAND CEMENT, CALCIUM FORMATE

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>ORDINARY PORTLAND CEMENT</b> <span style="float: right;"><b>30-60%</b></span>
CAS number: 65997-15-1 <span style="margin-left: 100px;">EC number: 266-043-4</span>
<b>Classification</b> Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335
<b>CALCIUM FORMATE</b> <span style="float: right;"><b>1-5%</b></span>
CAS number: 544-17-2 <span style="margin-left: 100px;">EC number: 208-863-7</span>
<b>Classification</b> Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

**Composition comments**      Contains OPC with a CrVI level below 2ppm.

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Consult a physician for specific advice.
<b>Inhalation</b>	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

## BAL FLEX ONE

<b>Inhalation</b>	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
<b>Ingestion</b>	May cause chemical burns in mouth and throat.
<b>Skin contact</b>	May cause serious chemical burns to the skin.
<b>Eye contact</b>	May cause severe eye irritation. May cause blurred vision and serious eye damage.

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

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
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### **5.2. Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.

### **5.3. Advice for firefighters**

<b>Protective actions during firefighting</b>	No specific firefighting precautions known.
<b>Special protective equipment for firefighters</b>	Wear chemical protective suit.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet.
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### **6.2. Environmental precautions**

<b>Environmental precautions</b>	Do not discharge into drains or watercourses or onto the ground.
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### **6.3. Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	Avoid contact with skin or inhalation of spillage, dust or vapour. Dampen spillage with water. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.
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### **6.4. Reference to other sections**

<b>Reference to other sections</b>	Wear protective clothing as described in Section 8 of this safety data sheet.
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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Usage precautions</b>	Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid handling which leads to dust formation.
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### **7.2. Conditions for safe storage, including any incompatibilities**

## BAL FLEX ONE

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### ORDINARY PORTLAND CEMENT

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

#### CALCIUM FORMATE (CAS: 544-17-2)

#### DNEL

Workers - Dermal; Short term systemic effects: 4780 mg/kg/day

Workers - Inhalation; : 337 mg/m<sup>3</sup>

Workers - Dermal; Short term local effects: 16.7 mg/cm<sup>2</sup>

General population - Dermal; Short term systemic effects: 2390 mg/kg/day

General population - Inhalation; : 83.2 mg/m<sup>3</sup>

General population - Dermal; Short term local effects: 8.3 mg/cm<sup>2</sup>

General population - Oral; : 23.9 mg/kg/day

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygiene measures

Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a suitable dust mask. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

#### Thermal hazards

Not applicable.

**BAL FLEX ONE**

**Environmental exposure controls**          Avoid release to the environment.

<b>SECTION 9: Physical and chemical properties</b>
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**9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Dusty powder.
<b>Colour</b>	White/off-white.
<b>pH</b>	pH (concentrated solution): 12-13
<b>Solubility(ies)</b>	Slightly soluble in water.

**9.2. Other information**

<b>SECTION 10: Stability and reactivity</b>
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**10.1. Reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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**10.2. Chemical stability**

<b>Stability</b>	Stable at normal ambient temperatures.
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**10.3. Possibility of hazardous reactions**

<b>Possibility of hazardous reactions</b>	Not applicable.
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**10.4. Conditions to avoid**

<b>Conditions to avoid</b>	Avoid contact with acids. Water, moisture.
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**10.5. Incompatible materials**

<b>Materials to avoid</b>	Strong acids. Aluminium powder
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**10.6. Hazardous decomposition products**

<b>Hazardous decomposition products</b>	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
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<b>SECTION 11: Toxicological information</b>
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**11.1. Information on toxicological effects****Skin corrosion/irritation**

<b>Skin corrosion/irritation</b>	Severe skin irritation.
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<b>Extreme pH</b>	≥ 11.5
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**Serious eye damage/irritation**

<b>Serious eye damage/irritation</b>	Causes serious eye damage.
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**Respiratory sensitisation**

<b>Respiratory sensitisation</b>	Not known.
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**Skin sensitisation**

<b>Skin sensitisation</b>	May cause sensitisation or allergic reactions in sensitive individuals.
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**Germ cell mutagenicity**

<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
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<b>Genotoxicity - in vivo</b>	Based on available data the classification criteria are not met.
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## BAL FLEX ONE

### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard

**Aspiration hazard** Not relevant.

### **Inhalation**

May cause respiratory system irritation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

### **Ingestion**

Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

### **Skin contact**

The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

### **Eye contact**

Risk of serious damage to eyes. May cause chemical eye burns.

### **Acute and chronic health hazards**

Repeated exposure in excess of the WEL has been linked with rhinitis and coughing. Skin exposure has been linked to allergic chromium dermatitis.

## SECTION 12: Ecological information

### **Ecotoxicity**

The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

### 12.1. Toxicity

#### **Toxicity**

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

### 12.2. Persistence and degradability

#### **Persistence and degradability**

Not relevant. After hardening, cement presents no toxicity risks. There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

#### **Bioaccumulative potential**

No data available on bioaccumulation.

### 12.4. Mobility in soil

#### **Mobility**

The product is non-volatile. The product is insoluble in water and will sediment in water systems.

### 12.5. Results of PBT and vPvB assessment

#### **Results of PBT and vPvB assessment**

Not relevant.

### 12.6. Other adverse effects

#### **Other adverse effects**

None known.

## BAL FLEX ONE

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Product that contains >2ppm CrVI should be disposed of according to local legislation or should be treated with a reducing agent before use. Product that is within shelf life may be hydrated with water and disposed of according to local legislation. The hydrated product is not hazardous.

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**Road transport notes** Not classified.

**Rail transport notes** Not classified.

**Sea transport notes** Not classified.

**Air transport notes** Not classified.

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

Not applicable.

#### Transport labels

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

##### Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

### SECTION 15: Regulatory information

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

**National regulations** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

## BAL FLEX ONE

**Guidance** Workplace Exposure Limits EH40.  
CHIP for everyone HSG228.  
Safety Data Sheets for Substances and Preparations.  
Approved Classification and Labelling Guide (Sixth edition) L131.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### **SECTION 16: Other information**

<b>Revision comments</b>	1
<b>Issued by</b>	Technical Manager
<b>Revision date</b>	15/04/2019
<b>Hazard statements in full</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.