



## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

#### 1.1. Product identifier

**Product Name** Magma HardMaster W616

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

**Identified Uses** Flowable concrete.  
**Uses advised against** No specific uses advised against are identified.

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

**Supplier** Meon Ltd.  
 Railside  
 Northharbour Spur  
 Portsmouth  
 PO6 3TU  
 +44 (0) 23 9220 0606  
 mail@meonuk.com

#### 1.4. Emergency Telephone Number

**Emergency telephone** +44 (0) 808 118 1922

### SECTION 2: Hazards identification

Irritating to eyes and skin. Risk of serious damage to eyes. May cause burns in the presence of moisture due to generation of strong alkaline solution of calcium hydroxide.

May cause allergic dermatitis due to the sensitivity of an individual's skin to soluble chromium (VI) in the presence of moisture.

Dust may cause irritation of the respiratory tract.

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

##### Classification (EC) No. 1272/2008

Hazard class	Hazard category	Classification procedure
Skin irritation	2	On the basis of test data
Serious eye damage/eye irritation	1	On the basis of test data
Skin sensitisation	1	On the basis of literature survey
Specific target organ toxicity single exposure respiratory tract irritation	3	On the basis of literature survey

##### Classification according to Directive 1999/45/EEC

Xi Irritant

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### 2.2. Label Elements

Labelling according to Regulation (EC) 1272/2008:

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

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

Precautionary statement(s)

P102 - Keep out of reach of children  
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
 P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.  
 P302+P352+P333+P313 - Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.  
 P261+P304+P340+P312 - Avoid breathing dust/fumes, gas, mist, vapours, spray. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician.  
 P501 - Dispose of contents/container according to local regulations.

Supplementary precautionary statement(s)

Skin contact with wet mortar may cause irritation, dermatitis or burns.  
 May cause damage to products made of aluminum or other non-noble metals.

### 2.3. Other hazards

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

##### 3.1. Substances

##### 3.2. Mixtures

Can contain calcium silicates, Silica sands, PFA, water, aluminates and ferro aluminates, with calcium carbonate. Small quantities of ferrous and calcium sulphate, lime and alkalis, together with trace amounts of chromium compounds. Coloured material will contain synthetic iron oxide pigments  
 Concrete products contain various sized aggregates.

Hazardous Ingredient

Calcium hydroxide Ca(OH)<sub>2</sub> generated on contact with water. Hexavalent chromium salts dissolve in water.

Under CLP EC 1272/2008

	CAS No.	EC No.	REACH	CLP Hazard Category	Hazard Statements	%
Ordinary Portland Cement (OPC)	65997-15-1	266-043-4	N/a	(1)STOT SE 3 (2)Skin irritation 2 (3) Serious eye damage/eye irritation 1 (4) Skin sensitization 1	(1) H335 – May cause respiratory irritation. (2) H315 – Causes skin irritation (3) H318 – Causes serious eye damage (4) H317 – May cause an allergic skin reaction	5 - 30

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### SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

#### 4.1. Description of first aid measures

<b>Inhalation (dust)</b>	Move to fresh air. Dust in throat and nasal passages should clear spontaneously. Seek medical attention if irritation persists or later develops or if discomfort, coughing or other symptoms persist.
<b>Ingestion</b>	Immediately rinse mouth and drink plenty of water. Do not induce vomiting. Seek immediate medical advice if person becomes uncomfortable. Show the container or label used.
<b>Skin contact</b>	Remove affected clothing, footwear, watches, jewelry etc. Wash skin with soap and water immediately. Wash contaminated clothing before re-use. Seek medical attention if irritation occurs.
<b>Eye contact</b>	Speed is essential. Immediately wash eyes with plenty of eyewash solution or running water, holding eyelids apart for 15 minutes. Do not rub eyes in order to avoid possible cornea damage as a result of mechanical stress. Always seek further specialist medical/eye specialist attention to check that all particles have been removed.

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

<b>Inhalation</b>	Irritating to the respiratory tract in high concentration.
<b>Skin contact</b>	Product may have an irritating effect on moist skin (due to sweat or humidity) after prolonged contact or may cause contact dermatitis after repeated contact. Prolonged skin contact with wet mortar or concrete may cause serious burns because they develop without pain being felt (for example when kneeling in wet product even when wearing trousers).
<b>Eye contact</b>	Eye contact with product (dry or wet) may cause serious and potentially irreversible injuries.
<b>Environment</b>	Under normal use, this product is not hazardous to the environment.

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

<b>Notes for the doctor</b>	When contacting for further medical advice, show container, label or this SDS sheet.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	The product is not combustible. Use a dry powder, foam or CO <sub>2</sub> fire extinguisher to extinguish the surrounding fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	None identified.

#### 5.2. Special hazards arising from the substance or mixture

None identified.

#### 5.3. Advice for firefighters

None identified.

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### SECTION 6: Accidental release measures

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

**For Non-emergency personnel**      Wear suitable protective equipment (see Section 8).

**For emergency responders**      N/a

#### 6.2. Environmental precautions

Do not wash product down sewage and drainage systems or into bodies of water (e.g. streams).

#### 6.3. Methods and material for containment and cleaning up

**Dry product**      Use cleanup methods such as vacuum cleaning-up or vacuum extraction fitted with EPA/HEPA air filters which do not cause airborne dispersion. Never use compressed air. Alternatively, wipe-up the dust by mopping, wet brushing or by using water spray or hoses (fine mist to avoid dust becoming airborne) and remove slurry. If not possible, remove by slurring with water (see wet product). If only dry cleaning by brushing can be done, ensure all appropriate personnel wear correct PPE including dust mask and eye protection at all times (see Section 8). Avoid inhalation of dust and place in a container and dispose of as detailed in Section 13.

**Wet product**      Clean up wet material and place in container or controlled location. Allow material to dry and solidify before disposal as detailed in Section 13.

#### 6.4. Reference to other sections

For more information on exposure controls/personal protection or disposal considerations, please check Section 8 and 13 and the Appendix of this safety data sheet.

### SECTION 7: Handling and storage

#### 7.1. Precautions on safe handling

**Protective Measures**      Do not ingest. Avoid contact with skin. Avoid contact with eyes  
Wear protective equipment (refer to Section 8 of this safety data sheet).  
Avoid generating dust.

**Advice on general occupational hygiene**      General occupational hygiene measures are required to ensure safe handling of the product. These measures involve good personal and housekeeping practices. Wash hands after use if contaminated. Avoid wearing contaminated clothing. Do not handle or store near food and beverages or smoking material. In dusty environment, wear dust mask, protective goggles and gloves.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions**      Bulk materials should be stored in silos that are waterproof.  
Packed products should be stored in unopened bags clear of the ground in cool, dry conditions and protected from excessive draught, excesses in temperatures in order to avoid degradation of quality.  
Bags should be stacked in a stable manner.  
Do not use aluminum containers due to incompatibility of the materials.

#### 7.3. Specific end use(s)

No additional information for the specific end users.

### SECTION 8: Exposure controls/personal protection

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## 8.1. Control parameters

### Workplace exposure limits

The following Workplace Exposure Limits (WEL's) for airborne dust are given in HSE Guidance Note EH40:

	W.E.L.	T.W.A.
Total dust	10 mg/m <sup>3</sup>	8 Hrs
Respirable dust	4 mg/m <sup>3</sup>	8 Hrs
Crystalline Silica (Respirable)	0.1 mg/m <sup>3</sup>	8 Hrs

W.E.L. = Workplace Exposure Limit

T.W.A. = Time Weighted Average

## 8.2. Exposure controls

### Appropriate engineering controls

Measures to reduce generation of dust and to avoid dust propagating in the environment such as regular housekeeping, exhaust ventilation and dry clean-up methods which do not cause airborne dispersion.

### Eye/face protection



Wear approved glasses or goggles according to EN 166 with anti-mist for eye protection when handling wet or dry material.

### Skin protection



Overalls and/or long-sleeved jackets and full-length trousers should be worn to protect skin from contact with wet products. Outer clothing should be waterproof if contact with wet product is likely.

Wear impermeable boots to protect feet. Safety wellington boots should be worn if working with wet product, with waterproof trousers pulled over them to help prevent product entering the boots.

If the product saturates clothing, or enters gloves or boots, remove the articles immediately and wash before wearing again.

### Respiratory protection



When a person is potentially exposed to dust levels above exposure limits, an appropriate respirator must be used dependent on expected dust levels.

### Thermal Hazards

The substance does not represent a thermal hazard, thus special consideration is not required.

### Environmental exposure controls

Not relevant unless large volume of product enter the watercourse.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

##### Wet Product

A mixture of sand, cementitious materials (aggregates added to concrete products) and water in a semi-solid state. Can be various colours dependent on added pigments.

##### Dry Product

A mixture of sand, cementitious materials (aggregates added to concrete products) in a powder form. Can be various colours dependent on added pigments.

#### Odour

Slight, earthy odour

#### Odour threshold

N/a

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pH	11 - 13.5 (20 °C in water, water solid ratio 1:2)
Melting point	1250 (typical)
Boiling point	Not determined
Flash point	N/a
Evaporation rate	N/a
Flammability	Non flammable
Explosive limits	Non explosive
Vapour pressure	N/a
Vapour density	0 at 20 °C
Relative density	3.0 (typical)
Solubility in water	Some components sparingly soluble
Partition coefficient	N/a
Auto-ignition temperature	N/a
Decomposition temperature	N/a
Viscosity	N/a
Oxidising properties	No oxidizing properties

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

When mixed with water, will harden into a stable mass that is not reactive in normal environments.

#### 10.2. Chemical stability

Stable product under recommended storage and handling conditions.

#### 10.3. Possibility of hazardous reactions

This product does not cause hazardous reactions.

#### 10.4. Conditions to avoid

Dry Products – avoid humid conditions which may cause lump formation and loss of product quality.

#### 10.5. Incompatible materials

Acids, ammonium salts, aluminium or other non-noble metals. Uncontrolled use of aluminium powder in wet product should be avoided as hydrogen is produced.

#### 10.6. Hazardous decomposition products

This product does not decompose into any hazardous products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicity endpoints

##### Outcome of the effects assessment

##### Acute toxicity

Based on available data, the classification criteria are not met.

##### Skin corrosion/irritation

##### Category 2

When in contact with wet skin may cause thickening, cracking or fissuring on the skin. Prolonged contact in combination with abrasion may cause severe burns.

##### Serious eye damage/irritation

##### Category 1

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Direct contact may cause corneal damage by mechanical stress, immediate or delayed irritation or inflammation. Direct contact by large amounts may cause effects ranging from moderate irritation to chemical burns and blindness

### Respiratory or skin sensitisation

#### Category 1

Some individuals may develop eczema upon exposure by either the high pH which induces irritant contact dermatitis after prolonged contact, or 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 as long as the period of effectiveness of the agent is not exceeded, a sensitising effect is not expected.

There is no indication of sensitisation of the respiratory system.

### Repeated dose toxicity

Based on available data, the classification criteria are not met.

### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

### Carcinogenicity

Based on available data, the classification criteria are not met.

### Toxicity for reproduction

Based on available data, the classification criteria are not met.

### STOT – single exposure

#### Category 3

Dust exposure may irritate the throat and respiratory tract. Coughing, sneezing, and shortness of breath may occur following exposures in excess of occupational exposure limits.

### STOT – repeated exposure

There is an indication of Chronic Obstructive Pulmonary Disease. The effects are acute and due to high exposures. No chronic effects or effects at low concentrations have been observed.

### Aspiration hazard

Not applicable as this product is not used as an aerosol.

### Information on likely routes of exposure

Contact with skin, eyes, ingestion and dust inhalation.

### Symptoms relating to the physical, chemical and toxicological characteristics

Dust exposure may irritate the throat and respiratory tract. Coughing, sneezing, and shortness of breath may occur following exposures in excess of occupational exposure limits.

When in contact with wet skin may cause thickening, cracking or fissuring on the skin. Prolonged contact in combination with abrasion may cause severe burns.

Some individuals may develop eczema upon exposure by either the high pH which induces irritant contact dermatitis after prolonged contact, or by an immunological reaction to soluble Cr(VI) which elicits allergic contact dermatitis.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Delay in treating eye contact can lead to serious and permanent eye damage.

Long term exposure to dust above the exposure limits can lead to lung disease.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Toxicity

The product is not hazardous to the environment. The addition of large amounts of the product to water may however cause a rise in pH and may, therefore, be toxic to aquatic life under certain circumstances.

### 12.2. Persistence and degradability

#### Persistence and degradability

Not relevant as this product is an inorganic material. After hardening, it presents no toxicity risks.

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### 12.3. Bioaccumulative potential

#### Bioaccumulative potential

Not relevant as this product is an inorganic material. After hardening, it presents no toxicity risks.

### 12.4. Mobility in soil

#### Mobility

Not relevant as this product is an inorganic material. After hardening, it presents no toxicity risks.

### 12.5. Results of PBT and vPvB assessment

#### Results of PBT and vPvB assessment

Not relevant as this product is an inorganic material. After hardening, it presents no toxicity risks.

### 12.6. Other adverse effects

No other adverse effects are identified.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Product – has exceeded its shelf life (indicated on packaging)

(and when demonstrated that it contains more than 0.002% Cr(VI): shall not be used/sold other than for use 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 reducing agent.

#### Product – unused residue or dry spillage

Pick up dry unused residue or dry spillage as is (refer to Section 6). Mark up containers. Possibly reuse depending upon shelf life considerations and the requirements to avoid dust exposure. In case of disposal, harden with water and dispose according to Section 6.3 above.

#### Product – slurries

Allow to harden, avoid entry in sewerage and drainage systems or into bodies of water. Dispose of as hardened product as concrete waste. This is not classed as a dangerous waste.

#### LoW/EWC entries

16 03 04 - inorganic wastes containing no dangerous substances.  
17 01 01 - construction and demolition wastes – concrete.

#### Packaging

#### LoW/EWC entry

Completely empty and clean packaging and process in accordance with local legislation.  
15 01 01 - waste paper and cardboard packaging  
15 01 02 - plastic packaging

#### If packaging is contaminated

20 03 01 - mixed municipal waste

## SECTION 14: Transport information

#### General

These products are not classified as hazardous for transport. No special precautions are needed apart from those mentioned under Section 8.

### 14.1. UN number

Not relevant

### 14.2. UN proper shipping name

Not relevant

### 14.3. Transport hazard class(es)

#### Hazard class

Not relevant

### 14.4. Packing group

Not relevant



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### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant 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

## SECTION 15: Regulatory information

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

The product contains Ordinary Portland Cement which is a mixture that is not subject to registration according to REACH. Cement clinker is exempt from registration (Art 2.7(b) and Annex V.10 of REACH).

Workplace Exposure Limits – HSE Guidance note EH40.  
Control of Substances Hazardous to Health latest Regulations.

The marketing and use of these products is subject to a restriction on the content of soluble Cr(VI) (REACH Annex XVII point 47 Chromium VI compounds).

### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for this substance.

## SECTION 16: Other information

<b>Hazard Statement(s)</b>	H315 - Causes skin irritation H317 - May cause an allergic skin reaction H318 - Causes serious eye damage H335 - May cause respiratory irritation
<b>Precautionary Statement(s)</b>	P102 - Keep out of reach of children 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. Immediately call a POISON CENTRE or doctor/physician. P302+P352+P333+P313 - Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. P261+P304+P340+P312 - Avoid breathing dust/fumes, gas, mist, vapours, spray. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician. P501 - Dispose of contents/container according to local regulations.
<b>Risk Phrases</b>	R37/38 - Irritating to respiratory system and skin R41 - Risk of serious damage to eyes R43 - May cause sensitisation by skin contact
<b>Safety Phrases</b>	S2 - Keep out of reach of children S22 - Do not breathe dust S24/25 - Avoid contact with skin and eyes S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection S46 - If swallowed, seek medical advice immediately and show this container or label

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### Abbreviations

STEL : short-term exposure limit.  
TWA: time weighted average.  
vPvB: very persistent, very bioaccumulative chemical.

### Key Literature References

Suppliers; Safety Data Sheets.  
In-house data files.  
HSE Guidance Note EH40.  
Supplier's safety data sheets.  
PPE Regulations.  
COSHH Regulations.  
Environmental Protection Act.  
European Cement Association – CEMBUREAU

#### *Disclaimer*

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