High Flow Grouts (GHF)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION OF THE COMPANY/UNDERTAKING

1.1. Product identifier Substance Name:
High Flow Grouts (GHF) - cement based

1.2. Relevant identified uses of the substance or mixture and uses advised against:
Uses: Refer to relevant Technical Data Sheet Uses advised against: Refer to relevant Technical Data Sheet

1.3. Company identification Name:
Reader Cement Products Ltd, Kirkby Lane, Pinxton, Nottinghamshire, NG16 6HX.
Telephone number: 01623 518350 E-mail: info@reader.co.uk

1.4. Emergency telephone: UK/European Emergency N°: 999

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:

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

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

2.1.2 Classification according to Directive 1999/45/EEC

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) 1272/2008 (CLP):

Signal word: Danger

Hazard pictogram:

Hazard statements:

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

Precautionary statements:

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

2.2.2 Labelling according to Directive 1999/45/EEC:

2.2 Label elements

Risk phrases:

R37/38 Irritating to respiratory system and skin R41 Risk of serious damage to eyes
R43 May cause sensitisation by skin contact

Safety phrases:

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

2.3 Other hazards

Long term exposure to dust can lead to the development of lung disease during mechanical cutting, grinding or sanding of the set product.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixtures:

The principal constituents of this product include Calcium and Ferro Silicates, Ferro Sulphates and Aluminates along with small amounts of Alkalis, Lime, and Chlorides together with trace amounts of Chromium Compound.
Hazardous Ingredient- Calcium Hydroxide generated on contact with water. Hexavalent chromium salts dissolve in water.

Under CLP EC 1272/2008

Ingredient	%	Reach Reg No.	CAS No.	EC No.	CLP Hazard Category	Hazard Statements
Portland Cement (CEM 1)	5-30	N/a	6599715-1	266043-4	(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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

4.1.1 Routes of exposure;

Inhalation (dust)	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
Eye contact	**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

Skin contact	Remove affected clothing, footwear, watches, jewellery etc. Wash skin with soap and water immediately. Wash contaminated clothing before re-use. Seek medical attention if irritation occurs
Ingestion	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

4.2 Most important symptoms and effects, both acute and delayed;

Eyes:
Eye contact with mortar (dry or wet) may cause serious and potentially irreversible injuries.
Skin:
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).
Inhalation:
Irritating to the respiratory tract in high concentration. Environment: Under normal use, this product is not hazardous to the environment.

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

When contacting further medical advise. Show container, label or this SDS sheet.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

5.1.2 Suitable extinguishing media;
The product is not combustible. Use a dry powder, foam or CO2 fire extinguisher to extinguish the surrounding fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.1.3 Unsuitable extinguishing media; None identified.

5.2 Special hazards arising from the substance or mixture:

None identified

5.3 Advice for fire fighters:

None identified

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For Non-emergency personnel;
Wear suitable protective equipment (see section 8).
6.1.2 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 duct becoming airborne) and remove slurry.
If not possible, remove by slurrying with water (see wet product).
If only dry cleaning by brushing can be done, ensure all appropriate personel 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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

7.1.1 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.

7.1.2 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:

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 aluminium 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

8.1 Control parameters:

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

Total dust -	W.E.L. 10mg/m3	8 Hrs T.W.A.
Respirable dust -	W.E.L. 4mg/m3	8 Hrs T.W.A
Crystalline Silica - (Respirable)	W.E.L. 0.1mg/m3	8 Hrs T.W.A

W.E.L. = Workplace Exposure Limit
T.W.A. = Time Weighted Average

8.2 Exposure controls:

8.2.1 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.

8.2.2: Individual protection measures, such as personal protective equipment:

8.2.2.1: Eye/face protection		Wear approved glasses or goggles according to EN 166 with anti-mist for eye protection when handling wet or dry materials
8.2.2.2: 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
8.2.3.3: Respiratory protection		When a person is potentially exposed to dust levels above exposure limits, an appropriate respirator must be used dependant on expected dust levels
8.2.2.4: Thermal Hazards		The substance does not represent a thermal hazard, thus special consideration is not required
8.2.3: Environmental Exposure Control		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** – semi solid state **Dry Product** – dry powder
Odour:	Slight, earthy odour
Odour threshold:	N/a
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 oxidising 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 Acute Toxicity	**Outcome of the effects assessment** 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** 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 product 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 products are 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:

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:

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

12.3 Bioaccumulative potential:

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

12.4 Mobility in Soils:

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

12.5 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 withreducing 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;
Completely empty and clean packaging and process in accordance with local legislation.
LoW/EWC entry: 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

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) – not relevant
14.4 Packing group – not relevant
14.5 Environmental hazards - not relevant
14.6 Special precautions for user - not relevant
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code - not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance:

The product contains Ordinary Portland Cement which is a mixture that is not subject to registration according to REACH. Cement clinker is exempt form registration (Art2.7(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

16.1 Hazard Statements:

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

16.2 Identified uses and use descriptors and categories

The table below gives an overview of all relevant identified uses of cement or cement containing hydraulic binders. All the uses have been grouped in these identified uses because of the specific conditions of exposure for human health and environment. For each specific use, a set of risk management measures or localised controls has been derived (see section 8) which need to be put in place by the user of cement or cement containing hydraulic binders to bring the exposure to an acceptable level.

Proc	Identified Used – Use Description	Manufacture / Formulation of	Professional/ Industrial use of
		Building and construction materials	
2	Use in closed, continuous process with occasional controlled exposure, eg industrial or professional manufacture of hydraulic binders	**X**	**X**
3	Use in closed batch process, eg industrial or professional manufacture of ready-mix concrete	**X**	**X**
5	Mixing or blending in batch process for formulation of mixtures and articles, eg industrial or professional manufacture of pre-cast concrete	**X**	**X**
7	Industrial spraying, eg industrial use of wet suspensions of hydraulic binders by spraying		**X**
8a	Transfer of substance or mixture from/to vessels/ large containers at non-dedicated facilities, eg use of cement in bags to prepare mortar		**X**
8b	Transfer of substance or mixture from/to vessels/ large containers a dedicated facilities, eg filling of silos, trucks or barges at cement plants X	**X**	**X**
9	Transfer of substance or mixture into small containers, eg filling of cement bags in cement plants	**X**	**X**
10	Roller application or brushing, eg products to improve adherence between building surfaces and finishing products		**X**
11	Non-Industrial spraying, eg professional use of wet suspensions of hydraulic binders by spraying		**X**
13	Treatment of articles by dipping and pouring, eg covering of construction products with a layer to improve the performance of the product		**X**

Proc	Identified Used – Use Description	Manufacture / Formulation of	Professional/ Industrial use of
		Building and construction materials	
14	Production of mixtures or articles by tabletting, compression extrusion, pelletisation, eg production of floor tiling	**X**	**X**
19	Hand-mixing with intimate contact and only PPE available, eg mixture of wet hydraulic binder on a construction site		**X**
22	Potentially closed processing operations with minerals/metals at elevated temperature in industrial setting, eg production of bricks		**X**
26	Handling of solid inorganic substances at ambient temperature, eg mixture of wet hydraulic binders	**X**	**X**

16.3 Abbreviations and acronyms

ACGIH	American Conference of Industrial Hygienists
ADR/RID	European Agreements on the transport of Dangerous goods by Road/Railway
APF	Assigned protection factor
CAS	Chemical Abstracts Service
CLP	Classification, labelling and packaging (Regulation (EC) No 1272/2008)
COPD	Chronic Obstructive Pulmonary Disease
DNEL	Derived no-effect level
EC50	Half maximal effective concentration
ECHA	European Chemicals Agency
EINECS	European INventory of Existing Commercial chemical Substances
EPA	Type of high efficiency air filter
ES	Exposure scenario
EWC	European Waste Catalogue
FF P	Filtering facepiece against particles (disposable)
FM P	Filtering mask against particles with filter cartridge
GefStoffV	Gefahrstoffverordnung
HEPA	Type of high efficiency air filter
H&S	Health and Safety
IATA	International Air Transport Association
IMDG	International agreement on the Maritime transport of Dangerous Goods
	LC50 Median
IMDG	lethal dose
MEASE	Metals estimation and assessment of substance exposure,

EBRC	Consulting GmbH for Eurometaux, http://www.ebrc.de/industrial-chemicals-reach/projects-andreferences/mease.php
MS	Member State
OELV	Occupational exposure limit value
PBT	Persistent, bio-accumulative and toxic
PNEC	Predicted no-effect concentration
PROC	Process category
RE	Repeated exposure
REACH	Registration, Evaluation and Authorisation of Chemicals
RPE	Respiratory protective equipment
SCOEL	Scientific Committee on Occupational Exposure Limit Values
SDS	Safety Data Sheet
SE	Single exposure
STP	Sewage treatment plant
STOT	Specific Target Organ Toxicity
TLV-TWA	Threshold Limit Value-Time-Weighted Average
TRGS	Technische Regeln für Gefahrstoffe
VLE-MP	Exposure limit value-weighted average in mg by cubic meter of air
vPvB	Very persistent, very bio-accumulative w/w Weight by weight
WWTP	Waste water treatment plant

16.4 Key literature references and 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.

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(6) U.S. EPA, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 4th ed. EPA/600/4-90/027F, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1993) and 5th ed. EPA-821-R-02-012, US EPA, office of water, Washington D.C. (2002).

(7) Environmental Impact of Construction and Repair Materials on Surface and Ground Waters. Summary of Methodology, Laboratory Results, and Model Development. NCHRP report 448, National Academy Press, Washington, D.C., 2001.

(8) Final report Sediment Phase Toxicity Test Results with Corophium volutator for Portland clinker prepared for Norcem A.S. by AnalyCen Ecotox AS, 2007.
(9) TNO report V8801/02, An acute (4-hour) inhalation toxicity study with Portland Cement Clinker CLP/GHS 03-2010-fine in rats, August 2010.
(10) TNO report V8815/09, Evaluation of eye irritation potential of cement clinker G in vitro using the isolated chicken eye test, April 2010.
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(12) 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.
(13) Cytotoxicity and genotoxicity of cement dusts in A549 human epithelial lung cells in vitro;
Gminski et al, Abstract DGPT conference Mainz, 2008.
(14) 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.
(15) 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.
(16) MEASE, Metals estimation and assessment of substance exposure, EBRC Consulting GmbH for Eurometaux, http://www.ebrc.de/industrial-chemicals-reach/projects-and-references/mease.php.
(17) Occurrence of allergic contact dermatitis caused by chromium in cement. A review of epidemiological investigations, Kåre Lenvik, Helge Kjuus, NIOH, Oslo, December 2011.

16.5 Relevant H-Statements H318:

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

16.6 Training advice

In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this SDS.

16.7 Further information

The data and test methods used for the purpose of classification of Common cements are given or referred to in section 11.1.

16.8 Revision:

Version Number:1
Date Prepared: 11/11/15 Supersedes; N/a
Nature of Revision - This version produced in reference to Annex II of the REACH Regulation (EC) 1907/2006 as amended by Regulation 453/2010.

16.9 Disclaimer

The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his/her own activities.

The advice shown on this sheet is given as a guide to good practice but Reader Cement Products Ltd. can accept no responsibility for any loss, damage or injury howsoever caused in following it.

This version of the SDS supersedes all previous versions.

End of safety data sheet