

# SAFETY DATA SHEET

## FRESH FACTORY MIXED CONCRETE

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

Date issued 11.12.2012

#### 1.1. Product identifier

Product name FRESH FACTORY MIXED CONCRETE

Synonyms Factory mixed concrete in strength classes B10 to B95 according to EN 206-1 for concrete structures in the durability classes M90, M60, M45, MF45, M40, MF40

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

Product group Concrete

Use of the substance/preparation Concrete constructions.

Relevant identified uses SU19 Building and construction work

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

##### Downstream user

Company name Unicon AS

Office address Professor Birkelandsvei 27 B

Postcode 1081

City Oslo

Country NORGE

Tel 67 55 54 44

Fax 67 55 54 40

E-mail info@unicon.no

Website http://www.unicon.no

Enterprise no. 942 822 979

Contact person Johnny Madsen

#### 1.4. Emergency telephone number

Emergency telephone Giftinformasjonen:22 59 13 00

### SECTION 2: Hazards identification

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

Classification according to Xi; R41

67/548/EEC or 1999/45/EC Xi; R38

Substance / mixture hazardous properties Risk of serious damage to eyes. Causes skin irritation.

#### 2.2. Label elements

##### Hazard symbol



Irritant

R phrases R38 Irritating to skin.

	R41 Risk of serious damage to eyes.
S phrases	S2 Keep out of the reach of children. S24 Avoid contact with skin. 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.

### 2.3. Other hazards

PBT / vPvB	PBT/vPvB assessment has not been performed.
Physicochemical effect	The product is not classified as flammable.
Health effect	R37 Irritating to respiratory system is omitted, as the product can not create dust.
Environmental effect	The product is not classified as harmful to the environment.
Other hazards	See also section 3.2.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Component name	Identification	Classification	Contents
Portland cement	CAS no.: 65997-15-1 EC no.: 266-043-4	Xi; R37/38, R41 STOT SE3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318	10 - 20 %
Description of the mixture	Construction materials on basis of minerals. Contains water and aggregates.		
Component comments	When additives are added at the construction site, an MSDS for this/these must exist. The portland cement contains max 2 mg water soluble chromates pr. kg. dry cement. See section 16 for explanation of H- and R-phrases listed above.		

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General	If in doubt, seek medical advice.
Inhalation	Not relevant. Provide rest, warmth and fresh air.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Consult a doctor if symptoms should occur.
Eye contact	Remove any contact lenses. Hold the eyelids apart. Immediately rinse eyes with a large amount of water. Transport to physician. Keep rinsing during transportation.
Ingestion	Rinse mouth thoroughly. Drink plenty of water. Do not induce vomiting. Get medical attention.

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

Acute symptoms and effects	Risk of serious damage to eyes.
Delayed symptoms and effects	Same as the acute symptoms.

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

Other Information	No specific treatment required, see section 4.1.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
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### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is non-combustible. No hazardous combustion products are expected.
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### 5.3. Advice for firefighters

Fire fighting procedures	Not relevant.
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## SECTION 6: Accidental release measures

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

Personal precautions Use protective equipment as referred to in section 8.

### 6.2. Environmental precautions

Environmental precautions Do not allow to enter into sewer, water system or soil.

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

Methods for cleaning Use mechanical handling equipment. Collect in suitable containers and deliver as waste according to section 13. Small quantities can be dissolved/diluted in water and flushed to drain.

### 6.4. Reference to other sections

Other instructions See also sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Handling Arrange working conditions to avoid direct contact. Use protective equipment as referred to in section 8.

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

Storage Not to be stored. Keep out of reach of children.

### 7.3. Specific end use(s)

Specific use(s) See section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Other Information about threshold limit values Does not create dust. No occupational exposure limit values.

### 8.2. Exposure controls

Occupational exposure controls Provide adequate ventilation. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Respiratory protection

Respiratory protection Normally not required.

#### Hand protection

Hand protection Use gloves from resistant material, eg.: Nitrile. Rubber, neoprene or PVC.

Breakthrough time > 8 hours. Other types of gloves may be recommended by the glove supplier.

#### Eye / face protection

Eye protection Wear tight-fitting goggles or face shield.

Additional eye protection measures Eye wash facilities should be at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

#### Skin protection

Skin protection (other than of the hands) Wear appropriate protective clothing to protect against possible skin contact. Use boots (the trousers outside the boots).

### Appropriate environmental exposure control

Environmental exposure controls Do not allow to enter into sewer, water system or soil.

### Other Information

Other Information Emergency shower should be available at the workplace. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements.

## SECTION 9: Physical and chemical properties

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

Physical state	Liquid to pasty, dependent on water content.
Colour	Gray. May be pigmented
Odour	Characteristic.
Comments, Odour limit	Not specified.
pH (aqueous solution)	Value: ~ 12
Melting point/melting range	Value: ~ 0 °C
Boiling point / boiling range	Value: ~ 100 °C
Comments, Flash point	Not combustible.
Comments, Evaporation rate	Not specified.
Flammability (solid, gas)	Not relevant, see flash point.
Comments, Explosion limit	Not specified.
Comments, Vapour pressure	Not relevant.
Comments, Vapour density	Not relevant.
Specific gravity	Value: ~ 2400 kg/m <sup>3</sup>
Solubility in water	Fully miscible.
Comments, Partition coefficient: n-octanol / water	Not specified.
Comments, Spontaneous combustability	Not relevant.
Comments, Decomposition temperature	Does not decompose.
Comments, Viscosity	Varies.

### Physical hazards

Explosive properties	Non-explosive.
Oxidising properties	Non-oxidizing.

### 9.2. Other information

#### Other physical and chemical properties

Comments	No further information is available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	No reactivity hazards.
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### 10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reactions known.
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### 10.4. Conditions to avoid

Conditions to avoid	None known.
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### 10.5. Incompatible materials

Materials to avoid	None expected.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicological Information:

Other toxicological data	There are no health hazard due to cured product.
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**Potential acute effects**

Inhalation	Not relevant.
Skin contact	Irritating to skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged or repeated exposure may cause irritation / pain and injuries.
Eye contact	Risk of serious damage to eyes.
Ingestion	Not likely, due to the form of the product. The product causes irritation of mucous membranes and may cause abdominal discomfort if swallowed.

**Delayed effects / repeated exposure**

Sensitisation	Sensitizing properties are not known. The cement used is chrome reduced to prevent sensitisation.
Chronic effects	No known chronic or acute health hazards.

**Carcinogenic, Mutagenic or Reprotoxic**

Carcinogenicity	Carcinogenic properties are not known.
Mutagenicity	Mutagenic properties are not known.
Teratogenic properties	Effects on fetus development are not known.
Reproductive toxicity	Effects harmful to reproduction are not known.

**SECTION 12: Ecological information****12.1. Toxicity**

Ecotoxicity	Not regarded as dangerous for the environment.
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**12.2. Persistence and degradability**

Persistence and degradability	The product reacts with water to form a solid insoluble reaction product which is non-degradable, according to information available.
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**12.3. Bioaccumulative potential**

Bioaccumulative potential	Not expected to bioaccumulate.
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**12.4. Mobility in soil**

Mobility	Miscible with water. Sinks in water.
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**12.5. Results of PBT and vPvB assessment**

PBT assessment results	PBT assessment has not been performed.
vPvB evaluation results	vPvB assessment has not been performed.

**12.6. Other adverse effects**

Other adverse effects / Remarks	Alkalies cause increased pH values in the water. A high pH value harms aquatic organisms.
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**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Specify the appropriate methods of disposal	Dispose of waste in local landfill.
Product classified as hazardous waste	No
EWC waste code	EWC: 17 01 01 concrete

**SECTION 14: Transport information****14.1. UN number**

Comment	Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.
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**14.2. UN proper shipping name**

Comment	Not relevant.
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**14.3. Transport hazard class(es)**

Comment Not relevant.

#### 14.4. Packing group

Comment Not relevant.

#### 14.5. Environmental hazards

Comment Not relevant.

#### 14.6. Special precautions for user

Special precautions for user Not relevant.

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

#### Other applicable information.

Other applicable information. Not relevant.

### SECTION 15: Regulatory information

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

References (laws/regulations)	FOR 2002-07-16 nr 1139; Norwegian regulation on classification and labelling of dangerous chemicals with later amendments. Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II Safety Data Sheets. Administrative norms for pollution of the atmosphere, the latest edition, from Norwegian labour inspection authority Norwegian regulations on waste, no. 930/2004, from Ministry of the Environment. ADR/RID 2011
Comments	The Safety Data Sheet is based on information provided by the producer. Risk phrase R37 is omitted, as the product can not create dust.
Declaration no.	80891

#### 15.2. Chemical safety assessment

Chemical safety assessment has been carried out	No
CSR required	No

### SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant R phrases (under headings 2 and 3).	R37/38 Irritating to respiratory system and skin. R38 Irritating to skin. R41 Risk of serious damage to eyes.
List of relevant H-phrases (Section 2 and 3).	H315 Causes Skin irritation. H318 Causes Serious eye damage. H335 May cause respiratory irritation.
Further information	Acronyms: PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
Sources of key data used to compile the safety data sheet	Common template designed for the members of FABEKO.
Information which has been added, deleted or revised	New Safety Data Sheet.
Checking quality of information	This SDS is quality controlled by National Institute of Technology in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008.

Responsible for safety data sheet Unicon AS

Prepared by National Institute of Technology as, Norway by Stine Bækkelund