

# SAFETY DATA SHEET

## FRESH FACTORY MIXED CONCRETE



The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	10.07.2007
Revision date	13.07.2017

#### 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	NORWAY
Tel	67 55 54 44
Fax	67 55 54 40
E-mail	<a href="mailto:Johnny.Madsen@unicon.no">Johnny.Madsen@unicon.no</a>
Website	<a href="http://www.unicon.no">http://www.unicon.no</a>
Enterprise no.	942 822 979
Contact person	Johnny Madsen

#### 1.4. Emergency telephone number

Emergency telephone	Tel: +47 22 59 13 00
---------------------	----------------------

Description: Norwegian Poison Information Center


## SECTION 2: Hazards identification

### 2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Irrit. 2; H315 Eye Dam. 1; H318
Substance / mixture hazardous properties	Causes skin irritation. Causes serious eye damage.
Additional information on classification	The mixture is not classified as STOT SE 3; H335: May cause respiratory irritation, because wet concrete does not dust. Classification based on extreme pH is not relevant. Only one component classified as corrosive is present in the mixture. The mixture should not have a classification that is stricter than the substance's own classification.

### 2.2. Label elements

#### Hazard Pictograms (CLP)

	
Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes Serious eye damage.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P280 Wear protective gloves / protective clothing / eye protection / face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor / physician.

### 2.3. Other hazards

PBT / vPvB	Not PBT / vPvB.
------------	-----------------

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents
Portland Cement, chromium reduction	CAS no.: 65997-15-1 EC no.: 266-043-4	STOT SE3;H335 Skin Irrit. 2;H315 Eye Dam. 1;H318 Skin Sens. 1; H317	10 – 20 %
Description of the mixture	Construction materials on basis of minerals. Contains water and aggregates.		
Substance comments	When additives are added at the construction site, a SDS for this/these must exist. The portland cement contains max 2 mg water soluble chromates pr. kg. dry cement CAS-no. 65997-15-1, REACH registration no.:-. No specific information from the manufacturer. See section 16 for explanation of hazard statements (H) listed above.		

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Not relevant. Fresh air and rest.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Flush immediately with plenty of water. Remove contact lenses and open eyes wide apart. Continue to rinse for 30 minutes. By prolonged rinsing, use luke warm water to avoid damage to the eye. Immediately consult a doctor. Transport to physician. Keep on flushing during transport.
Ingestion	Rinse mouth thoroughly. Drink a few glasses of water or milk. Never give liquid to an unconscious person. Do not induce vomiting. Get medical attention.

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

Acute symptoms and effects	Skin contact: The chemical irritates the skin and can cause itching, burning and redness. Eye contact: Causes severe burns and serious eye damage.
Delayed symptoms and effects	Same as the acute symptoms.

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

Other Information	Treat symptomatically. No specific information from the manufacturer.
-------------------	---

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
------------------------------	---

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

Fire and explosion hazards	The chemical is not classified as flammable. The chemical is non-combustible. None hazardous combustion products are expected.
----------------------------	--

#### 5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other Information	Containers close to fire should be removed immediately or cooled with water.

### SECTION 6: Accidental release measures

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

Personal protection measures	Use protective equipment as referred to in section 8.
------------------------------	---

#### 6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil.
--------------------------------------	---

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

Clean up	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.
----------	--

**Protective Safety Measures**

Advice on general occupational hygiene	Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.
--	--

**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	Contains no substances with occupational exposure limit values. References (laws/regulations): Norwegian regulation on exposure limits: FOR 2011-12-06 nr 1358 Forskrift om tiltaks- og grenseverdier (sist endret gjennom FOR-2016-12-22-1860).
--	--

**8.2. Exposure controls**

**Precautionary measures to prevent exposure**

Technical measures to prevent exposure	Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment. A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipments suitability and durability will depend on application.
--	---

**Eye / face protection**

Eye protection equipment	Description: Wear tight-fitting goggles or face shield. Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).
Additional eye protection measures	Eye wash facilities shall be at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

**Hand protection**

Suitable materials	Nitrile. Rubber, neoprene or PVC.
Breakthrough time	Value: > 8 hour(s) Comments: Other types of gloves may be recommended by the glove supplier.
Thickness of glove material	Comments: Not specified by the manufacturer.
Hand protection equipment	Description: Use chemical resistant gloves. Glove thickness must be chosen in consultation with the glove supplier, who can inform about the breakthrough time for the glove. The gloves abilities may vary among the different glove manufacturers. Reference to relevant standard: BS-EN 374 (Protective gloves against chemicals and micro-organisms). BS-EN 420 (Protective gloves. General requirements and test methods).

**Skin protection**

Recommended protective clothing	Description: Wear appropriate protective clothing to protect against possible skin contact. Use boots (the trousers outside the boots).
Additional skin protection measures	Emergency shower should be available at the workplace.

**Respiratory protection**

Recommended respiratory protection	Description: Normally not required.
------------------------------------	-------------------------------------

**Appropriate environmental exposure control**

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

**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.
Odour limit	Comments: Not known.
pH	Status: In aqueous solution Value: ~ 12
Melting point / melting range	Value: ~ 0 °C
Boiling point / boiling range	Value: ~ 100 °C
Flash point	Comments: Not combustible.
Evaporation rate	Comments: Not known.
Flammability (solid, gas)	Not relevant, see flash point.
Explosion limit	Comments: Not known.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Specific gravity	Value: ~ 2400 kg/m3
Bulk density	Comments: Not known.
Solubility	Medium: Water

	Comments: Completely soluble in water.
Partition coefficient: n-octanol/water	Comments: Not known.
Spontaneous combustability	Comments: Not relevant.
Decomposition temperature	Comments: Does not decompose.
Viscosity	Comments: Varies.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

## 9.2. Other information

### Other physical and chemical properties

Comments	No further information is available.
----------	--------------------------------------

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	No reactivity hazards.
------------	------------------------

### 10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
-----------	---

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reactions known.
------------------------------------	-------------------------------

### 10.4. Conditions to avoid

Conditions to avoid	None known.
---------------------	-------------

### 10.5. Incompatible materials

Materials to avoid	None expected.
--------------------	----------------

### 10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products.
----------------------------------	--------------------------------------

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Other toxicological data	There are no health hazard due to cured chemical.
--------------------------	---

### Other information regarding health hazards

Assessment of acute toxicity classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Irritating to skin.

Assessment eye damage or irritation, classification	Causes serious eye damage.
Assessment respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment skin sensitisation, classification	Based on available data, the classification criteria are not met. The cement used is chrome reduced to prevent sensitisation.
Assessment Germ Cell Mutagenicity, Classification	Based on available data, the classification criteria are not met.
Assessment carcinogenicity classification	Based on available data, the classification criteria are not met.
Assessment reproductive toxicity, Classification	Based on available data, the classification criteria are not met.
Assessment specific target organ SE, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity RE, classification	Based on available data, the classification criteria are not met.
Assessment aspiration hazard classification	Based on available data, the classification criteria are not met.

## Symptoms of Exposure

In case of ingestion	Unlikely because of the chemical condition. The product causes irritation of mucous membranes and may cause abdominal discomfort if swallowed.
In case of skin contact	The chemical irritates the skin and can cause itching, burning and redness. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged or repeated exposure may cause irritation / pain and injuries.
In case of inhalation	Ved blanding av sement til belong: Dust may irritate respiratory system.
In case of eye contact	Risk of serious damage to eyes.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecotoxicity	The chemical is not classified as harmful to the environment.
-------------	---

### 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.
-------------------------------	---

### 12.3. Bioaccumulative potential

Bioaccumulative potential	Not expected to bioaccumulate.
---------------------------	--------------------------------

### 12.4. Mobility in soil

Mobility	Miscible with water. Sinks in water.
----------	--------------------------------------

### 12.5. Results of PBT and vPvB assessment

PBT assessment results	The substance is not classified as PBT.
vPvB evaluation results	The substance is not classified as vPvB.

**12.6. Other adverse effects**

Other adverse effects / Remarks	Alkalies cause increased pH values in the water. A high pH value harms aquatic organisms.
------------------------------------	---

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Specify the appropriate methods of disposal	Dispose of waste in local landfill.
EWC waste code	EWC waste code: 170101 concrete Classified as hazardous waste: No
Other Information	Do not empty into drains.

**SECTION 14: Transport information**

Dangerous goods	No
-----------------	----

**14.1. UN number**

Comments	Not relevant.
----------	---------------

**14.2. UN proper shipping name**

Comments	Not relevant.
----------	---------------

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

Comments	Not relevant.
----------	---------------

**14.4. Packing group**

Comments	Not relevant.
----------	---------------

**14.5. Environmental hazards**

Comments	Not relevant.
----------	---------------

**14.6. Special precautions for user**

Special safety precautions for user	Not relevant.
--	---------------

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

Transport In Bulk Value (Yes/No)	No
-------------------------------------	----

**Additional information.**

Additional information.	Not relevant.
-------------------------	---------------

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**



References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).
Comments	Dangerous Goods regulations FRESH FACTORY MIXED CONCRETE are covered by paragraph 47, and its use is restricted according to REACH Annex XVII. This mixture does not meet the criteria for the restriction.
Declaration no.	80891

### 15.2. Chemical safety assessment

Chemical safety assessment performed	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 H-phrases (Section 2 and 3).	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes Serious eye damage. H335 May cause respiratory irritation.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Irrit. 2; H315 Eye Dam. 1; H318
Key literature references and sources for data	Common template designed for the members of FABEKO.
Abbreviations and acronyms used	PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail IMDG: The International Maritime Dangerous Goods Code IATA: The International Air Transport Association ICAO: The International Civil Aviation Organisation
Information which has been added, deleted or revised	Sections being revised since previous version: 1-16 (CLP)
Checking quality of information	This SDS is quality controlled by Kiwa Teknologisk Institutt in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008.
Prepared by	Kiwa Teknologisk Institutt as, Norway by Johan K. Rian