

BETONG ØST

SAFETY DATA SHEET

FRESH FACTORY MIXED CONCRETE

BETONG ØST

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	17.04.2015
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Revision date	18.01.2017
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1.1. Product identifier

Product name	FRESH FACTORY MIXED CONCRETE
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Synonyms	Factory mixed concrete in strength classes B10 to B95 according to NS-EN 206 for concrete structures in the durability classes M90, M60, M45, MF45, M40, MF40
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product group	Concrete.
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Use of the substance/preparation	Concrete constructions.
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Relevant identified uses	SU19 Building and construction work
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1.3. Details of the supplier of the safety data sheet

Downstream user

Company name	Betong Øst AS
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Office address	Mårvegen 14
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Postal address	Postboks 1223
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Postcode	2206
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City	Kongsvinger
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Country	Norge
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Tel	62888111
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E-mail	post@betongost.no
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Website	http://www.betongost.no
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Enterprise no.	976076850
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1.4. Emergency telephone number

Emergency telephone	Giftinformasjonen:22 59 13 00
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SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to	Skin Irrit. 2;H315;
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Regulation (EC) No 1272/2008	Eye Dam. 1;H318;
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[CLP/GHS]

Substance / mixture hazardous properties	Causes skin irritation. Causes serious eye damage.
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Additional information on classification	The chemical is not classified with STOT SE3; H335 May cause respiratory irritation, because wet concrete does not raise dust.
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	Classification on the basis of extreme pH is not relevant. There is only one
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component that has classification of corrosive effect. The mixture should not have a classification that is stricter than the substance own separate classification.

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label	Portland cement:10 - 20 %
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	CAS no.: 65997-15-1 EC no.: 266-043-4	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.		
Substance 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 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.

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

Cleaning method 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.

Other Information 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 Contains no substances with occupational exposure limit values.

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-2016-06-21-760).

8.2. Exposure controls

Limitation of exposure on workplace

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.

Respiratory protection

Respiratory protection

Normally not required.

Hand protection

Hand protection

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).

Suitable materials

Nitrile. Rubber, neoprene or PVC.

Breakthrough time

> 8 hours. Other types of gloves can be recommended by the glove supplier.

Thickness of glove material

Not entered.

Eye / face protection

Eye protection

Wear safety goggles or face shield (conforming to EN 166).

Skin protection

Skin protection (except hands)

Wear appropriate protective clothing to protect against possible skin contact.
Wear boots (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

Eye wash facilities must be available when handling this chemical. Emergency shower should be available at the workplace.

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 known.

pH (aqueous solution)

Value: ~ 12

Melting point/melting range

Value: ~ 0 °C

Boiling point / boiling range

Value: ~ 100 °C

Comments, Flash point

Not flammable.

Comments, Evaporation rate

Not known.

Flammability (solid, gas)

Not relevant, see flash point.

Comments, Explosion limit

Not known.

Comments, Vapour pressure

Not relevant.

Comments, Vapour density

Not relevant.

Specific gravity

Value: ~ 2400 kg/m³

Comments, Bulk density	Not known.
Solubility in water	Fully miscible.
Comments, Partition coefficient: n-octanol / water	Not known.
Comments, Spontaneous combustability	Not relevant.
Comments, Decomposition temperature	Does not decompose.
Comments, Viscosity	Varies.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

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 chemical.
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Acute toxicity, Mixture estimate

Assessment of acute toxicity classification	Based on available data, the classification criteria are not met.
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Potential acute effects

Inhalation	When mixing cement to concrete: Dust may irritate the respiratory system.
Skin contact	Irritating to skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
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.
Assessment corrosion / irritation classification	Irritating to skin.
Aspiration hazard	Based on available data, the classification criteria are not met.
Assessment eye damage or irritation, classification	Causes serious eye damage.

Delayed effects / repeated exposure

Skin contact	Prolonged or repeated exposure may cause irritation / burning and laceration.
Sensitisation	Sensitizing properties are not known. The cement used is chrome reduced to prevent allergies.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data the classification criteria are not met.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity	Based on available data, the classification criteria are not met.
Mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	The chemical is not classified as harmful to 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	Not PBT.
vPvB evaluation results	Not 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.
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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
Other Information	Do not empty into drains.

SECTION 14: Transport information

14.1. UN number

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

Comments	Not relevant.
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14.3. Transport hazard class(es)

Comments	Not relevant.
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14.4. Packing group

Comments	Not relevant.
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14.5. Environmental hazards

Comments	Not relevant.
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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

Pollution category Not relevant.

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. Norwegian regulations on waste. no. 930/2004, from the Ministry of Environment. Dangerous Goods regulations
Comments	Fersk Fabrikkblandet Betong 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.

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.
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Irrit. 2; H315; Eye Dam. 1; H318;
List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H315 Causes skin irritation. H335 May cause respiratory irritation.
Important data sources used to construct the safety data sheet	Common template designed for the members of FABEKO.
Information which has been added, deleted or revised	Sections being revised since previous version: 1-16
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.
Version	2
Responsible for safety data sheet	Betong Øst AS
Prepared by	Kiwa Teknologisk Institutt, Norway v/ Sissel Rogstad