SAFETY DATA SHEET

FRESH FACTORY MIXED CONCRETE

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 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
Revision date	11.06.2021

1.1. Product identifier

Product name	FRESH FACTORY MIXED CONCRETE
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

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	Betong Øst AS with associated companies
Office address	Mårvegen 14
Postal address	Postboks 1223
Postcode	2206
City	Kongsvinger
Country	Norge
Telephone number	62888111
Email	post@betongost.no
Website	www.betongost.no

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 22 59 13 00 Description: Norwegian Poison Information Center

SECTION 2: Hazards identification

2.1. Classification of the 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 chemical is not classified with STOT SE3; H335 May cause respiratory irritation, because wet concrete does not raise dust. Classification on the basis of extreme pH is not relevant. There is only one 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	Notes
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. For substances without REACH registration number, no information has been provided by the subcontractor or 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 113.
Inhalation	Not relevant. Fresh air and rest.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Consult a doctor if symptoms should occur.
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.
Hazardous combustion products	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

Control parameters comments	Contains no substances with occupational exposure limit values. Dust formation is unlikely based on the physical state of the chemical. References (laws/regulations): Norwegian regulation on exposure limits: FOR 2011-12-06 nr 1358 Forskrift om tiltaks– og grenseverdier (sist endret gjennom FOR-2020-07-02-1479).

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 equipment's 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 available 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 can be recommended by the glove supplier.
Thickness of glove material	Comments: Not specified as it is controlled by the breakthrough time.
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: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves – General requirements and test methods).
Additional hand protection measures	Replace gloves if signs of wear and tear.

Skin protection

Recommended protective clothing	Description: Wear appropriate protective clothing to protect against possible skin contact. Wear boots (pants on top of 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. See also section 12.

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 flammable.
Evaporation rate	Comments: Not known.
Flammability	Not relevant, see flash point.
Explosion limit	Comments: Not known.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Relative density	Value: ~ 2400 kg/m3
Bulk density	Comments: Not known.
Solubility	Medium: Water Comments: Fully miscible.
Partition coefficient: n-octanol/ water	Comments: Not known.
Auto-ignition temperature	Comments: Not relevant.
Decomposition temperature	Comments: Does not decompose.
Viscosity	Comments: Varies.
Explosive properties	Not explosive.
Oxidising properties	Not oxidizing.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	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 of eye damage or irritation, classification	Causes serious eye damage.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Sensitisation	Sensitizing properties are not known. The cement used is chrome reduced to prevent allergies.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	Not likely, due to the form of the product. 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 / burning and wound injuries.
In case of inhalation	When mixing cement to concrete: Dust may irritate respiratory system.
In case of eye contact	Risk of serious damage to eyes.

11.2 Other information

Endocrine disruption	No information available.

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 description/evaluation	The product reacts with water to form a solid insoluble reaction product which is non-degradable, according to information available.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Not expected to bioaccumulate.

12.4. Mobility in soil

Mobility	Miscible with water. Sinks in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties	No information available.

12.7. Other adverse effects

Additional ecological information	Alkalies cause increased pH values in the water. A high pH value harms aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	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 considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.

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. Maritime transport in bulk according to IMO instruments

Pollution category	Not relevant.

SECTION 15: Regulatory information

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

Restriction of chemicals according to Annex XVII (REACH)	Fresh Factory Mixed Concrete are covered by paragraph 47, and its use is restricted according to REACH Annex XVII. The restriction is not relevant to this mixture and use.
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 regulation on waste, 01.06.2004 no. 930, with later amendments. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. Norwegian regulation on declaration: FOR-2015-05-19-541, 01.06.2015 with later

	amendments.
Declaration No.	76435

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. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Key literature references and sources for data	Common template designed for the members of FABEKO.
Abbreviations and acronyms used	ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road EWC: European Waste Code (a code from the EU's common classification system for waste) IATA: The International Air Transport Association IBC: Intermediate Bulk Container. ICAO: The International Civil Aviation Organisation IMDG: The International Maritime Dangerous Goods Code MARPOL 73/78 is the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("MARPOL" is short for marine pollution and 73/78 short for the years 1973 and 1978.) PBT: Persistent, Bioaccumulative and Toxic RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail vPvB: very Persistent and very Bioaccumulative
Information added, deleted or revised	Sections being revised since previous version: 1-4, 7-9, 11-16
Checking quality of information	This SDS is quality controlled by Kiwa Kompetanse AS in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2015.
Version	4
Prepared by	Kiwa Kompetanse, Norway by Sissel Rogstad