

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ecocem CEM III/A Next Generation Cement

Revision date: 27.03.2017

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

1.1. Product identifier

CEM III/A Blastfurnace Cement

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

Use of the substance/mixture

Products containing cement, low in chromate

Uses advised against

any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Ecocem Ireland Ltd.
Street: Unit F1 Eastpoint Office Park
Place: Dublin 3
Telephone: +353 1 678 1800 Fax: +353 1 678 1816
e-mail: info@ecocem.ie
www.ecocem.ie

1.4. Emergency telephone number: National Poison Centre +353 1809 2166 (Mon – Fri 08.00 – 22.00)
+353 1809 2566 (24 Hours)
Ecocem: +353 1 678 1800 (Mon – Fri 9.00 – 17.00)

Further Information

The product develops an alkaline pH value with moisture and can cause irritation.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Portland cement
Flue dust, portland cement

Signal word: Danger

Pictograms:



Hazard statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

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H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container to local/regional/national/international regulations.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
65997-15-1	Portland cement			35 - < 64 %
	266-043-4			
	Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, STOT SE 3; H315 H318 H317 H335			
65996-69-2	Slags, ferrous metal, blast furnace			36 - < 65 %
	266-002-0		01-2119487456-25	
68475-76-3	Flue dust, portland cement			1 - < 5 %
	270-659-9		01-2119486767-17	
	Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, STOT SE 3; H315 H318 H317 H335			

Full text of H and EUH statements: see section 16.

Further Information

low chromate cement composition according to 2003/53/EC
Cement product for which the amount of chromium VI was decreased to < 0,0002 % by a reduction agent (related to the total dry weight).
Proper storage and compliance with the expiration date is a prerequisite for the effectiveness of the chromate reduction
Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or illness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

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After contact with eyes

Rinse cautiously with water for several minutes. If symptoms persist, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Drink water in small sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam. Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow to enter drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.
Do not breathe dust.
Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Take up mechanically.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Usual measures for fire prevention. Dust clouds may present an explosion hazard.

Further information on handling

Avoid generation of dust.

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General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food or animal feeding stuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Protect against: moisture.

When not stored properly (moisture ingress) or Shelf-life expiration, the chromate reduction will lose its effectiveness, and sensitization by skin contact can not be excluded.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
65997-15-1	Cement (Portland) (Respirable Fraction)	-	1		TWA (8 h)	
		-	-		STEL (15 min)	
-	Dust non-specific, respirable	-	4		TWA (8 h)	
		-	-		STEL (15 min)	
-	Dust non-specific, total inhalable	-	10		TWA (8 h)	
		-	-		STEL (15 min)	

PNEC values

CAS No	Substance	Value
Environmental compartment		
65996-69-2	Slags, ferrous metal, blast furnace	
Freshwater		5000 mg/l
Marine water		500 mg/l
Micro-organisms in sewage treatment plants (STP)		10000 mg/l
Soil		1000 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Dust should be exhausted directly at the point of origin.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Eye/face protection

Dust protection goggles.

Hand protection

Wear suitable gloves.

Suitable material:



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FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time: \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time: \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time: \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time: \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time: \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary when exposure limits are exceeded

-In the case of the formation of dust.

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). type P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid dry powder

Colour: Grey

Odour: Odourless

Test method

pH-Value: 11 - 13

Changes in the physical state

Melting point: >1250

Initial boiling point and boiling range: N/A

Sublimation point: N/A

Softening point: N/A

Pour point: N/A

Flash point: N/A

Sustaining combustion: Does not sustain combustion

Explosive properties

none

Lower explosion limits: N/A

Upper explosion limits: N/A

Ignition temperature: N/A

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Auto-ignition temperature

Solid: N/A

Decomposition temperature: N/A

Oxidizing properties

none

Vapour pressure: N/A

Density: 2.75 – 3.00

Bulk density: N/A

Water solubility: slightly soluble (< 2g/L) g/L

Solubility in other solvents

not determined

Partition coefficient: N/A

Viscosity / dynamic: N/A

Viscosity / kinematic: N/A

Flow time: N/A

Vapour density: N/A

Evaporation rate: N/A

Solvent separation test: N/A

Solvent content: N/A

9.2. Other information

Solid content: N/A

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Protect against: moisture.

10.5. Incompatible materials

Oxidizing agents, strong. Reducing agents, strong. Strong acid. Fluorine.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

No data available.



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
65997-15-1	Portland cement				
	dermal	LD50 >2000 mg/kg	Rabbit.	Lit.(1)	
	inhalative (4 h) aerosol	LC50 5 mg/l	Rat.	Lit.(2)	
65996-69-2	Slags, ferrous metal, blast furnace				
	oral	LD50 >2000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >4000 mg/kg	Rat	ECHA Dossier	
	inhalative (4 h) aerosol	LC50 >5,23 mg/l	Rat	ECHA Dossier	

Irritation and corrosivity

Causes skin irritation.
Causes serious eye damage.
No data available.

Sensitising effects

May cause an allergic skin reaction.
No data available.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
No data available.

STOT-single exposure

May cause respiratory irritation. (Portland cement)
No data available.

STOT-repeated exposure

Based on available data, the classification criteria are not met.
No data available.

Aspiration hazard

Based on available data, the classification criteria are not met.
No data available.

Specific effects in experiment on an animal

No data available.

Further information

Lit. 1: Observations on the effects of skin irritation caused by cement, Kietzman et al, Dermatosen, 47, 5, 184-189 (1999).
Lit. 2: TNO report V8801/02, An acute (4-hour) inhalation toxicity study with Portland Cement Clinker CLP/GHS 03-2010-fine in rats, August 2010.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
65996-69-2	Slags, ferrous metal, blast furnace					
	Acute fish toxicity	LC50 mg/l	>100000	96 h	Leuciscus idus	ECHA Dossier
	Acute algae toxicity	ErC50 mg/l	>100000	72 h	Desmodesmus subspicatus	ECHA Dossier
	Acute crustacea toxicity	EC50 mg/l	>100000	48 h	Daphnia magna	ECHA Dossier
	Crustacea toxicity	NOEC mg/l	>= 1563	21 d	Daphnia magna	ECHA Dossier

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

BCF

CAS No	Chemical name	BCF	Species	Source
65996-69-2	Slags, ferrous metal, blast furnace	10	algae	ECHA Dossier

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes containing hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

101314 WASTES FROM THERMAL PROCESSES; wastes from manufacture of cement, lime and plaster and articles and products made from them; waste concrete and concrete sludge

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.



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Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	0% (calculated.)
2004/42/EC (VOC):	0g/L (calculated.)
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3, 47

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 - slightly water contaminating

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15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
Slags, ferrous metal, blast furnace

SECTION 16: Other information

Changes

Rev. 1.0; Initial release 27.03.2017

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

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

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data. and / or calculated. and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be



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transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)