

READY MIXED CONCRETE

Conforms to Regulation (EC) No. 1907/2006
(REACH), Annex II and SI 2019:758 (UK REACH)

Version 4 Revision Date 14.6.2021

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

1.1 Product identifiers

Product name: Ready Mixed Concrete

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

Identified uses: Used as a construction material in public and private infrastructure or construction projects

1.3 Details of the supplier of the safety data sheet

Supplier/distributor: Aggregate Industries UK Ltd.

Bardon Hall

Copt Oak Road

Markfield

Leicestershire

LE67 9PJ

United Kingdom

Telephone: 01530 510006 (General Technical Enquiries)

1.4 Emergency phone number:

UK National Poisons Information Service 0344 892 0111

(Health professionals only)

Ireland National Poisons Information Centre (01) 809 2566

Precautionary statement(s)

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.

P302+P352+P333+P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention

P261+P304+P340+P312: Avoid breathing dust. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician if you feel unwell..

2.3 Other hazards

Wet concrete is not likely to create dust, but respirable dust may be released by the surface treatment, cutting or drilling of hardened concrete. Prolonged inhalation of respirable dust can constitute a long term health hazard. Respirable crystalline silica (quartz) has been associated with the lung disease silicosis. The quartz content of the aggregate used in concrete will vary depending on the type of mineral deposit from which the aggregate originated.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

According to Regulation (EC) No.1272/2008

Skin irritation (Category 2) H315

Eye Damage (Category 1) H318

Skin Sensitisation (Category 1) H317

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Signal word Warning

Hazard statement(s)



H315 Causes skin Irritation

H317 May cause an allergic skin reaction

H318 Causes severe eye damage.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

A blend of sand, aggregates, Portland cement and water. May also contain ground granulated blast furnace slag, pulverised fuel ash and admixtures.

Component	Classification	Concentration
Crystalline Silica (respirable fraction)		
CAS-No.	14808-60-7STOT-RE 1, H372i	<5%
EC-No.	238-878-4	
Registration No.	01-2120770509-45-xxxx	
Portland Cement		
CAS-No.	65997-15-1Skin Irrit., H315; Eye Irrit.1, H318, STOT SE 3,	Variable
H335;		
Skin Sens. 1, H317		
EC-No.	266-043-4	
Registration No.	[-]	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled: Inhalation of wet concrete is not a realistic mode of exposure. See Section 11 for information concerning inhalation of dry residues or process dusts arising from working with cured material.

In case of skin contact: Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain prompt medical attention.

In case of eye contact: Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. Get immediate medical attention.

If swallowed: Ingestion of significant quantities of ready mixed concrete is unlikely. Do not induce vomiting. Give plenty of water to drink. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media - Suitable extinguishing media

Material is not flammable or combustible. Use media suitable for other any other materials present that may be involved in a fire.

5.2 Special hazards arising from the substance or mixture

None.

5.3 Advice for firefighters

Material will not burn and will not be affected by other extinguishing media used to fight fires that may be present in surrounding areas. Do not allow firefighting run-off to enter watercourses.

5.4 Further information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use suitable personal protective equipment (refer to Section 8 for details).

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

6.3 Methods and materials for containment and cleaning up

Scoop up and place in plastic container to await transfer. Allow residues to cure, then damp down and sweep up. Do not dry sweep residues.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use heavy duty gloves to prevent mechanical irritation.

7.2 Conditions for safe storage, including any incompatibilities

Keep container closed to minimise material drying out and undergoing premature curing. The hardening process of ready-mixed concrete can be delayed by the addition of additives and or admixtures, extending the period during which the precautions given in this data sheet should continue to be taken and during which access by unauthorised persons should be prevented. Store in a cool place.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with occupational exposure limits

Not assigned to wet ready mixed concrete. The following exposure limits apply to dry residues or process dusts:

Component	CAS No.	Reference period	Exposure Limit	Basis
Respirable Silica	14808-60-7	8hr TWA	0.1mg/m ³	UK. EH40 WEL
Portland Cement	65997-15-1	8hr TWA (Respirable dust) 8hr TWA (Total dust)	10mg/m ³ 4mg/m ³	UK. EH40 OEL UK. EH40 OEL
Nuisance Dust	[-]	8hr TWA (Respirable dust) 8hr TWA (Total dust)	10mg/m ³ 4mg/m ³	UK. EH40 OEL UK. EH40 OEL

8.2 Exposure controls

Appropriate engineering controls

Use in well ventilated areas. Use mechanical ventilation in poorly ventilated areas.

Personal protective equipment

Eye/face Protection: Wear suitable eye protection such as safety glasses or goggles to Standard S EN 166 if splash or eye contact likely.

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with good practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of

EU Directive 89/686/EEC and the standard EN 374 derived from it. Recommended glove types include any impervious heavy duty glove.

Body Protection: Impervious clothing, the type of protective equipment must be selected according to the prevalent conditions at the specific workplace.

Respiratory Protection: See Section 11 for information concerning inhalation of dry residues or process dusts arising from working with cured material. Where risk assessment in accordance with the hierarchy of controls established within the Chemical Agents Directive shows a requirement for respirators as a means of control use a particulate filter type P3 or equivalent.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Grey granular paste/semi solid.
b)	Odour	None
c)	Odour Threshold	No data available
d)	pH	>12.5
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	Not applicable
g)	Flash point	Not applicable
h)	Evaporation rate	Not applicable
i)	Flammability (solid, gas)	Non flammable
j)	Upper/lower flammability or explosive limits Vapour pressure	Non-explosive
k)	Vapour density	Negligible
l)	Relative density	Not applicable
m)	Water solubility	2.0 (average)
n)	Partition coefficient: (n- octanol/ water)	Insoluble in water
o)	Auto-ignition temperature	No data available
p)	Decomposition temperature	Not applicable
q)	Viscosity	No data available
r)	Explosive properties	Viscous
s)	Oxidizing properties	None
t)		None

9.2 Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable.

10.2 Chemical stability

Stable at normal temperatures and under recommended storage conditions.

10.3 Possibility of hazardous reactions

None expected under normal conditions.

10.4 Conditions to avoid

None.

10.5 Incompatible materials

Strong mineral acids.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

None

Skin corrosion/irritation and serious eye damage/eye irritation

Skin contact with wet material may cause skin irritation, ulceration and irritant contact dermatitis. Wet material will cause severe eye irritation

Respiratory or skin sensitisation

May cause sensitisation by skin contact

Germ cell mutagenicity

None

Carcinogenicity

IARC classified respirable silica as a Group 1 carcinogen. The carcinogenic status of respirable silica and its presence in wet cement is further addressed below.

Reproductive toxicity

None

Specific target organ toxicity - single exposure

None. While wet/moist the inhalation potential is negligible.

Specific target organ toxicity - repeated exposure

Prolonged exposure by inhalation may lead to silicosis. See below for further details.

Aspiration hazard

Not applicable

Potential health effects - Inhalation, ingestion, skin and eyes

Ingestion may be harmful if swallowed and can cause corrosion and ulceration of the oesophageal tract. Skin contact may cause skin burns, ulceration and contact dermatitis. Causes serious eye damage

Signs and Symptoms of Exposure

Contact with eyes can cause: Redness, Blurred vision and severe eye pain. Contact with skin may cause skin irritation, ulceration and irritation/ dermatitis. Chronic exposure to dry residues by inhalation may cause cough, breathlessness and lung fibrosis.

Additional Information

Inhalation exposure hazards of dry residues or process dusts arising from working with cured material

This material has the potential for generation of respirable dust during handling and use of dry residues and process dusts arising from working with cured material. Dust may contain respirable crystalline silica. Prolonged inhalation of respirable dust may cause lung fibrosis. Principal symptoms of lung fibrosis are cough and breathlessness. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Repeated inhalation of excessive amounts of respirable silica may cause silicosis

Prolonged inhalation of respirable crystalline silica

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.

SECTION 12: Ecological information

2.1 Toxicity

Wet concrete will be expected to be toxic to aquatic life due to the highly alkaline nature of the leachate produced during curing.

12.2 Persistence and degradability

Non persistent in wet form; will rapidly set to an inert cured state.

12.3 Bioaccumulative potential

Expected to be low.

12.4 Mobility in soil

Immobile once cured.

12.5 Results of PBT and vPvB assessment

Will not meet PBT or vPvB criteria.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allow surplus and non-recyclable unused material to cure fully and then contact a licensed professional waste disposal service to dispose of this material as controlled non-hazardous waste.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

14.6 Special precautions for user

No data available

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

Not applicable

SECTION 15: Regulatory information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 (as amended) and SI 2019:758 (UK REACH)

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

Health & Safety at Work etc. Act 1974

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009

Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)

EH40/2005 Workplace Exposure Limits (as amended)

Environmental Protection Act 1990

Hazardous Waste Regulations 2005 (as amended)

15.2 Chemical Safety Assessment

No data available.

SECTION 16: Other information

Further information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H335 May cause respiratory irritation
H372i Causes damage to organs through prolonged or repeated exposure by inhalation

Revision History

Revision to version 3 of November 2017 in line with legislative updates and changes.

Recommended restrictions on use

Use in accordance with manufacturer's technical instructions. The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Aggregate Industries UK Limited. (Aggregate). However, Aggregate makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.