

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name CONCRETE (PREMIXED CONCRETE)
Synonym(s) S10, S15, N20, N25, S25, S30, S32, N32, N40, N50, S40, S50 - PRODUCT CODE(S)

1.2 Uses and uses advised against

Use(s) BUILDING MATERIAL • CONCRETE • WET MIX CONCRETE

1.3 Details of the supplier of the product

Supplier name EB MAWSONS & SONS PTY LTD
Address 141 King George Street, Cohuna, Vic, Australia, 3568
Telephone (03) 5456 2409
Fax (03) 5456 2428
Email Not supplied
Website Not supplied

1.4 Emergency telephone number(s)

Emergency Not supplied

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS Classification(s) Skin Corrosion/Irritation: Category 2
 Serious Eye Damage / Eye Irritation: Category 1
 Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)

2.2 GHS Label elements

Signal word DANGER

Pictograms



Hazard statement(s)

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.

Prevention statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 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.
 P321 Specific treatment is advised - see first aid instructions.

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P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.
Storage statement(s)	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
Disposal statement(s)	
P501	Dispose of contents/container in accordance with relevant regulations.

2.3 Other Hazards

Some susceptible individuals may exhibit an allergic skin response upon exposure to portland cement, possibly due to trace amounts of chromium.

Prolonged exposure to portland cement in the wet form can cause serious, potentially irreversible skin or eye damage in the form of chemical burns. The same serious injury can occur if wet or moist skin or eyes have prolonged contact exposure to dry portland cement.

3. COMPOSITION/ INFORMATION ON INGREDIENTS**3.1 Substances / Mixtures**

Ingredient	CAS number	EC number	Content
CONCRETE SAND	Not Available	Not Available	<85%
PORTLAND CEMENT	65997-15-1	266-043-4	3 - 60%
SILICA (AMORPHOUS-PRECIPIATED)	7699-41-4	231-716-3	<20%
METALLIC OXIDE PIGMENT(S)	Not Available	Not Available	<5%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder
CRUSHED STONE, GRAVEL OR BLAST FURNACE SLAG	Not Available	Not Available	<95%
FLY ASH	68131-74-8	268-627-4	<30%
POLYPROPYLENE OR STEEL FIBRE(S)	Not Available	Not Available	<10%
POLYSTYRENE BEADS	Not Available	Not Available	<10%
CRYSTALLINE SILICA	Not Available	Not Available	Not Available

Ingredient notes *

4. FIRST AID MEASURES**4.1 Description of first aid measures**

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	Due to product form / nature of use, an inhalation hazard is not anticipated.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Rinse mouth with water.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Irritating and potentially corrosive to the eyes and skin. Due to the product form (wet-mix), over exposure via inhalation is not anticipated with normal use, unless dust is generated via cutting, grinding, machining, etc dry/set product. Chronic over exposure to silica quartz dust may result in silicosis (lung disease). Principal symptoms of silicosis are coughing and breathlessness. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. Crystalline silica and hexavalent chromium

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compounds are classified as carcinogenic to humans (IARC Group 1).

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Where storage is applicable, store in a clean, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled. Store removed from direct sunlight.

7.3 Specific end use(s)

None known.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Portland Cement	SWA [AUS]	--	10	--	--

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Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering Controls Avoid generating dust. All work with should be carried out in such a way as to minimise exposure to dust and repeated skin contact. Where dust could be generated whilst handling, use local mechanical ventilation or extraction in areas where dust could escape into the work environment.

PPE

Eye/Face Wear safety glasses and splash-proof goggles.
Hand Wear PVC or rubber gloves.
Body When using large quantities or where heavy contamination is likely, wear coveralls and rubber boots.
Respiratory No PPE specified.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	GREY SLURRY
Odour	CHARACTERISTIC ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	12 to 13
Vapour density	NOT AVAILABLE
Specific gravity	2.3
Solubility (water)	FORMS A SLURRY
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

None known.

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10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat sources and direct sunlight.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), ethanol, interhalogens (e.g. chlorine trifluoride) and acids.

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Information available for the product: Based on available data, the classification criteria are not met. Ingestion may result in nausea, vomiting and gastrointestinal irritation.
Skin	Causes skin irritation. Contact may result in irritation, redness, pain, rash and dermatitis. Caution: Prolonged contact with wet-mix may cause serious skin burns.
Eye	Causes serious eye damage. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible alkaline burns. Caution: Prolonged contact with wet-mix may cause serious eye damage.
Sensitisation	Not classified as causing respiratory sensitisation. However, some individuals may exhibit an allergic response upon exposure to cement, possibly due to trace amounts of chromium.
Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1), however due to the trace amounts present, the criteria for classification is not met.
Reproductive	Insufficient data available to classify as a reproductive toxin.
STOT - single exposure	Over exposure to dust (if generated) may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties.
STOT - repeated exposure	Due to the product form (wet-mix), over exposure via inhalation is not anticipated with normal use. However, if dust is generated via cutting, grinding, machining, etc dry/set product, repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness.
Aspiration	Not expected to present an aspiration hazard.

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

No ecological data is available for this material.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Results of PBT and vPvB assessment

No information provided.

12.6 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Reuse or recycle where possible. Ensure measures are taken to prevent dust generation. Dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
14.1 UN number	None allocated	None allocated	None allocated
14.2 UN proper shipping name	None allocated	None allocated	None allocated
14.3 Transport hazard classes	None allocated	None allocated	None allocated
14.4 Packing group	None allocated	None allocated	None allocated

14.5 Environmental hazards Not a Marine Pollutant

14.6 Special precautions for user

Hazchem Code None allocated

15. REGULATORY INFORMATION

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

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)]

WHS regulatory information

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Ingredient name	CAS number	Regulation	Details
CRYSTALLINE SILICA	-	Restricted Hazardous Chemicals	Free silica (crystalline silicon dioxide). For abrasive blasting >1%.
		Schedule 14 - Health Monitoring	Crystalline silica

Inventory listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**

All components are listed on AICS, or are exempt.

15.2 Chemical safety assessment

No information provided.

16. OTHER INFORMATION

Additional information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

CEMENT CONTACT DERMATITIS: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence of soluble (hexavalent) chromium.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration

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	LD50	Lethal Dose, 50% / Median Lethal Dose
	mg/m ³	Milligrams per Cubic Metre
	OEL	Occupational Exposure Limit
	pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm	Parts Per Million
	STEL	Short-Term Exposure Limit
	STOT-RE	Specific target organ toxicity (repeated exposure)
	STOT-SE	Specific target organ toxicity (single exposure)
	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
	SWA	Safe Work Australia
	TLV	Threshold Limit Value
	TWA	Time Weighted Average

Report Status This ChemAlert report has been independently compiled by RMT's scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

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Last Reviewed: 22-Feb-2019
Date Printed: 11-Mar-2020
Based on SDS dated: 22-Feb-2019

End of Report

Additional Research Data

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CHEMICAL FOOTPRINT

The following Chemical Footprint (CFP) assessment aims to provide further clarity surrounding the long-term health and environmental impact of hazardous chemicals.

Overall	10
CMR	0
Endocrine	0
Sensitising	0
Physical	0
Environment	0
Waste	20

INGREDIENT TOXICOLOGICAL DATA**PORTLAND CEMENT (65997-15-1) 3 - 60%**

Physicochemical Sets in an exothermic reaction to a solid of low strength within hours after mixing with water. Continuing slower exothermic reactions harden the product to a tough gray stony mass. Incompatible with acids, acid chlorides, and acid anhydrides when set. Incompatible with ammonium salts and aluminum metal when wet and unset.

End of Additional Research Data