



SAFETY DATA SHEET (SDS/MSDS)

Product: Concrete, Premixed Concrete

Western Suburbs Concrete, Total Concrete Solutions T/A WSC



Document status	Controlled issue subject to WSC review and authorisation
Version	2.0
Issue date	27 May 2026
Review due	27 May 2031, or earlier if formulation, classification, regulation, exposure data, or supplier information changes
Replaces	MSDS, Concrete, Premixed Concrete, dated 10 May 2021
Emergency	For fire, spill, injury or exposure emergency call 000. For poisons information in Australia call 13 11 26.

KEY SAFETY MESSAGE

DANGER. Wet concrete is highly alkaline and can cause serious eye damage, skin irritation, alkali burns and cement dermatitis. Dust generated from hardened concrete by cutting, grinding, drilling, crushing, sweeping, abrasion or demolition can contain respirable crystalline silica, which may cause serious lung disease including silicosis and cancer after repeated inhalation exposure. Prevent skin contact, eye contact and dust generation.

Global GreenTag Product Health Declaration integration

Global GreenTag PHD basis: WSC ready-mixed concrete is listed under Global GreenTag Product Health Declaration licence TOT:PE01:2025:PH, licence date 28 November 2025, valid to 28 November 2026. The PHD records 100% percentage assessed at 100 ppm product level using nested materials, GreenTag Banned List compliance, and Platinum HealthRate recognition. This SDS uses that PHD as a health transparency input, while maintaining WHS controls for wet concrete and dust exposure.

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier	Concrete, Premixed Concrete
Other names / synonyms	Ready-mixed concrete, grout, mortar, blockfill, wet concrete, plastic concrete. Stabilised sand / sand cement only where supplied under a specific nominated product.
Recommended use	Ready-mixed concrete for residential, commercial, industrial and civil construction. Use only for its intended construction purpose and in accordance with relevant project specifications, SWMS, site controls and applicable laws.
Supplier	Total Concrete Solutions Pty Ltd ACN 093 240 049 and South Coast Basalt Pty Ltd ACN 000 734 430 trading as Western Suburbs Concrete.
ABN	40 426 304 484
Address	1 Coombes Drive, Penrith NSW 2750, Australia. PO Box 288, Penrith NSW 2751.
Telephone	+61 2 4761 6161
Email	rayt@wsc.com.au
Emergency contact	In an emergency call 000. For poisoning advice in Australia call Poisons Information Centre 13 11 26. Company contact, +61 2 4761 6161 during business hours.

SECTION 2: HAZARDS IDENTIFICATION

Classification: Hazardous chemical according to the Australian WHS framework. Not classified as Dangerous Goods for transport under the Australian Dangerous Goods Code. Hazard classifications below apply to wet concrete, dry residues, and dust generated from hardened concrete depending on the exposure scenario.

Hazard class / category	Hazard statement	Applicability
Skin irritation, Category 2	H315, Causes skin irritation.	Wet concrete and cementitious residues.
Serious eye damage, Category 1	H318, Causes serious eye damage.	Wet concrete, splashes, dry dust.
Skin sensitisation, Category 1	H317, May cause an allergic skin reaction.	Trace chromium VI in cementitious binders.
Specific target organ toxicity, single exposure, Category 3	H335, May cause respiratory irritation.	Dust, mist, spray or dried residues.
Specific target organ toxicity, repeated exposure, Category 1/2	H372/H373, May cause damage to lungs through prolonged or repeated inhalation exposure.	Respirable dust containing crystalline silica.
Carcinogenicity, Category 1A/1B	H350, May cause cancer by inhalation.	Respirable crystalline silica dust generated from cutting, grinding, drilling, crushing, abrasion, demolition or dry sweeping.

Signal word: Danger.

Main hazards: wet concrete can cause alkali burns, serious eye injury and cement dermatitis. Hardened concrete is stable in normal use, however dust generated by mechanical processing can contain respirable crystalline silica. Avoid breathing dust and avoid dry clean-up methods.

Precautionary statements: Do not breathe dust, mist or spray. Wash exposed skin thoroughly after handling. Wear protective gloves, impervious boots, long sleeves, long pants and eye/face protection. Use wet methods, dust extraction and respiratory protection where dust may be generated. Contaminated work clothing should not be allowed out of the workplace. Dispose of contents in accordance with local regulations.

Response: IF IN EYES, rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do, continue rinsing and get urgent medical attention. IF ON SKIN, remove contaminated clothing and wash with plenty of water. IF INHALED, move person to fresh air and keep comfortable. Get medical advice if symptoms persist.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

This product is a variable mixture. Proportions depend on specified strength, exposure classification, workability, special performance requirements and nominated raw materials. The ranges below are typical/consolidated SDS ranges and may overlap because not every ingredient is present in every supplied mix.

Ingredient / material group	CAS number or identifier	Typical proportion	Hazard notes
Portland cement / GP or SL cement and cementitious binder	65997-15-1 and proprietary binder identifiers	0-60%	Alkaline. May cause skin irritation, serious eye damage, respiratory irritation and sensitisation.
Fine and coarse aggregates, manufactured sand, natural sand, crushed stone, gravel	May contain quartz, 14808-60-7	20-85%	Dust generated from hardened concrete may contain respirable crystalline silica.
Ground granulated blast furnace slag, fly ash, pozzolans and supplementary cementitious materials	65996-69-2 and other mineral identifiers	0-30%	Dust may irritate skin, eyes and respiratory tract. Some materials may contain trace metals or crystalline silica depending on source.
Silica fume / amorphous silica where specified	69012-64-2, 7631-86-9, or supplier specific	0-10%	Fine particulate may cause respiratory discomfort if airborne.
Water	7732-18-5	0-20%	Not hazardous.
Chemical admixtures, water reducers, high-range water reducers, air entrainers, accelerators, retarders	Proprietary mixtures	<5% typical, product dependent	May be irritant in concentrated form. In supplied concrete, ingredients are diluted and bound into the wet/cured matrix.
Pigments, fibres, lightweight fillers or special additives, if specified	Product specific	0-10%, polystyrene beads may be volume based	Hazards vary by additive. Refer to project mix design or supplier SDS where required.
Chromium VI, trace impurity in cement	18540-29-9, or cement impurity records	<0.01% or trace ppm levels	Sensitiser and carcinogen in certain exposure scenarios. Typically trace in cementitious products and bound/reduced within the matrix.

Ingredient transparency note: The Global GreenTag PHD lists declared ingredients to a 100 ppm product level and risk assesses ingredients using GHS based hazard classifications. Proprietary substances are declared through the PHD process where supplier confidentiality applies.

SECTION 4: FIRST AID MEASURES

Exposure route	First aid instructions
Inhalation	Move affected person to fresh air. Keep at rest and comfortable for breathing. If coughing, wheezing, shortness of breath or irritation persists, seek medical attention. If breathing is difficult, oxygen should be given by trained personnel.
Skin contact	Remove contaminated clothing, footwear and jewellery. Wash affected skin thoroughly with clean running water and mild soap. Do not use abrasive cleaners. Seek medical attention for persistent redness, irritation, rash, dermatitis or burning. Launder clothing before reuse.
Eye contact	Immediately rinse eyes with gently flowing water for at least 15 minutes while holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing and seek urgent medical attention due to risk of serious eye damage and alkali burns.
Ingestion	Rinse mouth and lips with water. Do not induce vomiting. Give water to drink if conscious. Seek medical advice if symptoms occur or if a significant quantity is swallowed.
First aid facilities	Provide eye wash, clean running water, safety shower or washroom facilities, and ready access to first aid.
Advice to doctor	Treat symptomatically. Wet concrete is alkaline and may cause delayed alkali burns. Consider dust exposure history for respiratory symptoms. Contact Poisons Information Centre, 13 11 26, for advice.

SECTION 5: FIREFIGHTING MEASURES

Item	Information
Flammability	Not flammable and not combustible.
Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire. Concrete does not support combustion.
Specific hazards	No hazardous combustion products expected from concrete itself. Packaging, adjacent materials, admixture containers or site materials may present fire hazards.

Item	Information
Firefighter protection	Wear protective equipment suitable for the surrounding fire and site conditions. Avoid dust generation during post-fire clean-up.
Hazchem code	None allocated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions: Wear gloves, eye protection, impervious boots and suitable clothing. Keep unprotected personnel away from wet concrete and dusty areas.
- Wet concrete spills: Recover by shovel, loader, mechanical sweeper or other suitable equipment. Avoid uncontrolled wash-down. Prevent entry into drains, stormwater, sewers and waterways.
- Dust or dry residues: Avoid dry sweeping. Use wet suppression, misting or a vacuum fitted with suitable filtration to prevent airborne dust.
- Environmental precautions: Wet concrete and wash water are alkaline. Contain washout and report significant contamination of drains or waterways to the relevant authority and company representative.
- Disposal: Allow residues to harden where appropriate and dispose as inert construction waste in accordance with local authority requirements.

SECTION 7: HANDLING AND STORAGE

Topic	Requirements
Safe handling	Avoid skin and eye contact. Do not kneel, sit or stand in wet concrete without impermeable protection. Do not allow wet concrete inside boots, gloves or clothing. Wash hands and exposed skin before eating, drinking, smoking or using the toilet.
Dust generating work	Before cutting, grinding, drilling, crushing, abrading or demolishing hardened concrete, complete a task specific risk assessment and use wet cutting, on-tool extraction, isolation and suitable respiratory protection.
Storage	Delivered wet concrete has no normal storage requirement. It begins to set after delivery and hardens with time depending on temperature, wind, humidity, cement content, admixtures and mix type. Store hardened residues to prevent dust generation and stormwater contamination.
Incompatibilities	Avoid contact of wet concrete and wash water with drains and waterways. Avoid contact with strong acids unless professionally managed.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

The following limits apply to airborne contaminants that may be generated from dry concrete, cementitious materials, residues or hardened concrete processing. Exposure must be controlled so far as is reasonably practicable and maintained below applicable workplace exposure limits.

Airborne contaminant	CAS / identifier	Workplace exposure limit	Notes
Respirable crystalline silica, quartz / cristobalite	14808-60-7 / 14464-46-1	0.05 mg/m3, 8 hour TWA	Applies to respirable dust from cutting, grinding, crushing, drilling, abrasion, demolition or dry residues.
Portland cement, respirable dust	65997-15-1	1 mg/m3, 8 hour TWA	Dust control required during dry handling or clean-up of cementitious residues.
Chromium VI compounds	18540-29-9 and related	Refer to current Safe Work Australia WEL and jurisdictional requirements	Dermal sensitiser and carcinogenicity concern. Health monitoring may apply for inorganic chromium exposure.

Engineering controls: Use wet methods, water suppression, slurry management, on-tool dust extraction, local exhaust ventilation, enclosure, isolation and housekeeping controls. Do not use compressed air for cleaning. Clean work areas regularly and avoid dust accumulation.

Respiratory protection: Where dust cannot be adequately controlled, use a properly selected and fit-tested particulate respirator. A P2 respirator may be suitable for many short duration low-dust tasks, but higher protection, powered air or supplied air may be required for higher dust levels, confined spaces or prolonged work. Select, fit, use and maintain respirators in accordance with AS/NZS 1715 and AS/NZS 1716.

PPE	Minimum guidance
Eye / face	Safety glasses with side shields, chemical goggles or face shield. Use higher protection for splashing wet concrete or dusty work.
Hands	Alkali resistant, impervious gloves. Inspect and replace damaged gloves.
Skin / body	Long sleeves, long pants and protective clothing. Impervious boots suitable for wet concrete. Avoid trapped wet concrete inside boots or gloves.
Hygiene	Wash exposed skin promptly. Do not eat, drink or smoke while handling. Do not take dusty clothing or shoes into vehicles or homes. Launder contaminated clothing separately.
Health monitoring	Health monitoring may be required where there is a significant risk of exposure to respirable crystalline silica, inorganic chromium or other regulated contaminants. Follow WHS laws and medical advice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Typical information
Appearance	Mouldable, generally grey wet mixture that sets and hardens to a stable solid. Colour may vary depending on cement, aggregates, pigments and admixtures.
Odour	Generally low odour. Some admixtures may produce an ammonia-like or chemical odour.
pH	Dry state generally >7. Wet/plastic concrete is strongly alkaline, typically >10 and may be around pH 12-13.
Melting point	>1200 degrees C, hardened concrete/aggregate matrix.
Solubility	Not soluble. Wet concrete and wash water form alkaline slurry.
Specific gravity / density	Specific gravity approximately 2.3-2.5 for hardened concrete, fresh unit mass varies by mix design.
Flash point / flammability limits / ignition temperature	Not applicable. Product is not flammable.
Particle size	Wet concrete is not an airborne particulate under normal supply. Dust from hardened concrete processing can include respirable particles below 10 microns.
Vapour pressure / vapour density / boiling point	Not applicable or not determined for this mineral mixture.

SECTION 10: STABILITY AND REACTIVITY

Topic	Information
Reactivity	Hydraulic cementitious reaction with water. Wet concrete sets and hardens with time.
Chemical stability	Stable under normal conditions of use. Hardened concrete is stable and inert under normal service conditions.
Conditions to avoid	Avoid uncontrolled dust generation, prolonged skin contact with wet concrete, uncontrolled washout, and release to waterways.
Incompatible materials	Strong acids may react with alkaline concrete/cementitious materials.
Hazardous decomposition products	None expected under normal use.
Hazardous reactions	No hazardous polymerisation. Crystalline silica is stable and does not decompose into hazardous by-products under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Route / effect	Information
Ingestion	Unlikely during normal industrial use. May cause abdominal discomfort, nausea, cramps or vomiting due to abrasiveness and alkalinity.
Eye contact	Wet concrete may cause severe irritation, redness, watering, alkali burns and serious eye damage. Dry concrete dust may cause mechanical irritation.
Skin contact	Wet concrete may cause irritation, dryness, chemical burns, alkali burns and cement dermatitis. Prolonged or repeated contact increases the risk.
Skin sensitisation	Trace water-soluble hexavalent chromium compounds in cement may cause allergic contact dermatitis in sensitised individuals.
Inhalation, acute	Spray, mist and dust may irritate nose, throat and respiratory tract. Symptoms may include coughing, sneezing, wheezing and breathing difficulty. Pre-existing asthma, bronchitis or other respiratory conditions may be aggravated.
Inhalation, chronic	Repeated or prolonged inhalation of respirable crystalline silica dust may cause silicosis, chronic respiratory disease and lung cancer. Risk is associated with dust generated from cutting, grinding, crushing, drilling, abrasion or dry clean-up.
Cured product in normal use	In the cured, intact product, mineral ingredients are bound in the hardened concrete matrix. The Global GreenTag PHD reports in-use risk assessment outcomes as controlled/no concern under normal use, but this does not apply to uncontrolled dust generating work.

SECTION 12: ECOLOGICAL INFORMATION

Topic	Information
Ecotoxicity	Wet concrete and wash water form alkaline slurry and may be harmful to aquatic environments if released in quantity. Prevent entry into drains, stormwater and waterways.
Persistence and degradability	Hardened concrete is persistent and has low degradability.
Mobility	Low mobility once hardened. Wet slurry and wash water may move with stormwater if not contained.
Other adverse effects	Dust containing crystalline silica is not expected to be toxic to aquatic or terrestrial organisms, but dust and sediment releases should be controlled as environmental pollutants.

SECTION 13: DISPOSAL CONSIDERATIONS

- Return surplus wet concrete to the plant or designated recovery area where practicable.
- Contain washout water in approved washout areas, bins or treatment systems. Do not discharge wet concrete, slurry or wash water to drains, stormwater or waterways.
- Allow residues to harden where suitable and dispose of hardened concrete as inert construction and demolition waste in accordance with local authority and site requirements.
- Avoid dust generation during breaking, loading or disposal of hardened concrete. Apply dust suppression and PPE controls described in Section 8.
- Dispose of admixture containers, contaminated PPE or other packaging according to supplier SDS and local regulations.

SECTION 14: TRANSPORT INFORMATION

Transport item	Information
UN number	None allocated.
UN proper shipping name	None allocated.
Dangerous Goods class	Not classified as Dangerous Goods for transport by road or rail under the Australian Dangerous Goods Code.
Packing group	None allocated.
Hazchem code	None allocated.
Special precautions	Prevent spillage to drains and waterways. Secure loads. Manage wet concrete washout and returning loads in accordance with site and company procedures.

SECTION 15: REGULATORY INFORMATION

Regulatory item	Status / guidance
WHS classification	Hazardous chemical due to wet concrete alkalinity, cementitious irritation/sensitisation hazards, and respirable crystalline silica dust hazards where dust is generated.
Dangerous Goods	Not classified as Dangerous Goods under the Australian Dangerous Goods Code.
SDS framework	Prepared using the 16-section SDS format for hazardous chemicals in Australia and GHS hazard communication principles.
Airborne exposure	Respirable crystalline silica exposure must be controlled below applicable limits and so far as reasonably practicable. Air monitoring, health monitoring and silica controls may be required depending on task and jurisdiction.
Chromium VI	Trace chromium VI may be present in Portland cement. Chromium VI compounds have dermal sensitisation and regulatory health monitoring considerations in some exposure scenarios.
Global GreenTag PHD	Product health declaration and transparency certification, not a Dangerous Goods classification and not a substitute for WHS risk management.

SECTION 16: OTHER INFORMATION

Global GreenTag Product Health Declaration summary included for transparency:

PHD item	Information
Certified entity / product	Total Concrete Solutions T/A WSC, Western Suburbs Concrete, Ready-mixed Concrete.
Product stages assessed	Manufacturing + In-Use.
Product type / CSI MasterFormat	Concrete, 03 00 00.
Licensed site	Penrith, Australia.
Licence number	TOT:PE01:2025:PH.
Licence date / valid to	28 November 2025 / 28 November 2026.
Standard / screening date	GGT International v4.1 / 24 November 2025.
PHD URL	https://www.globalgreentag.com/certificate/3046
Assessment scope	100% assessed, 100 ppm product level inventory threshold, nested materials inventory method.
Recognition / notes	GreenTag Banned List Compliant. Recognised by Green Star, WELL and LEED material transparency and optimisation pathways as stated in the PHD.

Important note on the PHD: The PHD is an ingredient hazard disclosure and risk assessment transparency document. It is not medical advice and does not remove the need for workplace exposure controls, task specific SWMS, PPE, dust suppression or health monitoring where applicable.

Abbreviations:

Term	Meaning
ADG	Australian Code for the Transport of Dangerous Goods by Road and Rail.
GGT	Global GreenTag International.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
PHD	Product Health Declaration.
PPE	Personal protective equipment.
RCS	Respirable crystalline silica.
SDS / MSDS	Safety Data Sheet / Material Safety Data Sheet.
TWA	Time weighted average.
WEL	Workplace exposure limit.
WHS	Work health and safety.

Document control:

Prepared for	Western Suburbs Concrete
Prepared by	WSC Technical / HSEQ Department
Authorised by	Western Suburbs Concrete authorised representative, to be signed on controlled issue
Issue date	27 May 2026
Review date	27 May 2031, or earlier if required
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Disclaimer: The information in this SDS is based on WSC source information, the supplied Global GreenTag PHD, supplier information and current publicly available WHS guidance. It is provided in good faith for the safe handling, use, storage, transport and disposal of the product. Users must assess suitability for their specific work methods, exposures, local legal requirements and site conditions. This SDS does not replace training, supervision, SWMS, air monitoring or professional occupational hygiene advice where required.

END OF SDS