

MINERAL TURPS

Safety Data Sheet

1 IDENTIFICATION

Product name: MINERAL TURPS

Synonyms

Petropine, Turpentine Substitute

Product Code

437

Recommended use: Industrial solvent: cleaning and degreasing

Supplier Name CLEAN PLUS CHEMICALS PTY LTD

Address 16 George Young Street AUBURN NSW 2144

Telephone 02 9738 7444

Emergency 1800 201 700

Email customerservice@cleanplus.com.au

Web Site www.cleanplus.com.au

SDS Date 21 JANUARY 2021 Version 1.2

2 HAZARDS IDENTIFICATION

Health Hazard Classification

This product is classified as hazardous under Australian GHS criteria

Hazard Categories

Flammable Liquids: 3; Acute Toxicity - Oral: 3; Acute Toxicity - Inhalation: 4; Acute Toxicity - Dermal 4;
Acute Aquatic Toxicant: 3

Hazardous Statement

Flammable Liquid and
Vapour **GHS Pictograms**



Hazard Statements

H226: Flammable liquid and vapour

H302: Harmful if swallowed

H312: Harmful in contact with skin

AUH066: Repeated exposure may cause skin dryness or cracking

H336: May cause drowsiness or dizziness

Precautionary Statements

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P243: Take precautionary measures against static discharge.

P262: Do not get in eyes, on skin, or on clothing.

P378: Use sand, earth, or chemical foam to extinguish.

P301+312+101: IF SWALLOWED: Call a POISON CENTER/doctor, if you feel unwell, and have product container or label at hand.

Dangerous Goods Classification 3

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Poisons Schedule 5

3 COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%v/v)
Kerosene	Various	> 60.0
1,2,4-Trimethylbenzene	95-63-6	< 20
Propylbenzene and Isopropylbenzene (Cumene)	98-82-8	< 10
Mesitylene	108-67-8	< 10
Xylene, mixed isomers	1330-20-7	< 5

4 FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor. **Ingestion**

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Dry chemical or foam

Hazards from combustion products

Carbon dioxide and carbon monoxide

Precautions for fire fighters and special protective

equipment Full protective clothing and self-contained breathing apparatus **Hazchem Code:**

3Y

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for

containment Major Land Spill

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- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for safe handling

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress.

Incompatible materials

Natural Rubber, Butyl Rubber, EPDM, Polystyrene

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA) for this product is: 200 mg/m³ (41 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: None specified, which is the maximum allowable exposure concentration at any time.

Biological limit values

Not available

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type “A” filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

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Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	149 – 191
Flash Point	°C	31
Density @ 15°C	g/ml	0.812
Property	Unit of	Typical value
Vapour Pressure @ 20°C	kPa	0.429
Explosive Limits (LEL – UEL)	%	0.6 – 7.0
Vapour Density @ 20°C	kPa	Not available
Autoignition Temperature	°C	> 200
Viscosity @ 25°C	cSt	Not applicable
Percent Volatiles	%	100
Solubility with Water	% w/w	< 0.10

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable at room temperature and pressure

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

Carbon monoxide, carbon dioxide, and other organic complexes on incomplete burning or oxidation

Hazardous reactions

Oxidizing agents, mineral acids, halogenated organic compounds

Hazardous Polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema. Ingesting any amount of this product will result in headaches, nausea, dizziness, and tracheal burning.

Eye Contact

This product is irritating to eyes, but will not permanently damage the eye tissue

Skin Contact

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This product is irritating to the skin with prolonged exposure. It may result in dryness and cracking.

Inhalation

This product is irritating to the respiratory tract. Exposure to large concentrations over an extended period of time will result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations, and possible loss of consciousness.

Chronic Effects

This product may contain 0.1 to 1% of ethylbenzene. IARC has evaluated ethylbenzene and classified it as a "possible human carcinogen" (Group 2B) based on sufficient evidence for cancer in exposed humans. This product may contain 0.1 to 1% naphthalene.

Other Health Effects Information

None

Toxicological

Information Oral LD₅₀:

Not available Dermal

TC_{Lo}: Not available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic

Toxicity

Fish Toxicity (rainbow trout, goldfish, bluegill):

LC₅₀(96hr): Based on data for a similar component or preparation, this product is expected to be toxic to aquatic organisms.

Daphnia Magna EC₅₀ (24 hr):

Not available

Blue-green algae (Toxicity threshold 7-8 days):

Not available

Green algae (Toxicity threshold 7-8 days):

Not available

Persistence/ degradability

This product will evaporate and commence degradation on exposure to light and air.

Mobility

If product enters soil, it will be highly mobile and may contaminate groundwater

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1300	UN No.	1300	UN No.	1300
Proper Shipping Name	Turpentines	Proper Shipping Name	Turpentines	Proper Shipping Name	Turpentines
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None

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Pack Group	III	Pack Group	III	Pack Group	III
Hazchem	3Y	Hazchem	3Y	Hazchem	3Y

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group III. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS **Status:** Listed

Poisons Schedule: 5

16. OTHER INFORMATION

Additional Information

ABBREVIATIONS:

ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s)
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EINECS - European Inventory of Existing Commercial Substances.
GHS - Globally Harmonized System
IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m³ - Milligrams per cubic meter.
NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances.
TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: 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 Clean Plus Chemicals 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 Clean Plus Chemicals report is provided as a guide only. Factors such as 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.

Report Status

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals directly. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals 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 SDS.

Checklist 008

Project Risk Assessment



Purpose and Scope

This checklist utilises both the Safety Risk Matrix and Environmental Risk Matrix (also found in PR 002 Hazard and Risk Planning, Identification, Assessment and Control) and is undertaken at the beginning of a construction Project in conjunction with **CHK 006** – Site Start Up Requirements.

Project Name: 43-45 Chatham Tce

Project Number: 388

Date: 13.01.22

Person Conducting Assessment: Rob Mahony

General Site Access			
Applicable	Hazard		WMS Required
Yes	Unauthorised public access to the site and exposure to construction site hazards	☒ No boundary fence required as limited access to public and risk minimal ☐ Provide suitable protection including barricading / fencing / hoarding to prevent unauthorised access. Ensure members of the public. ☐ Place signage on the boundary fence or line describing the site as a construction workplace and that unauthorised entry is prohibited. ☐ Sub-contractors to use a spotter where delivery vehicles or trucks are entering and reversing from site. ☐ Other	No
Yes	Risk to public or persons on areas adjacent to or near construction site	☐ Obtain written authorisation for closure area. ☐ Advise neighbours of works ☒ Other: N/A as large block on hill, well clear of all aspects	No

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General Site Hazards			
Applicable	Hazard	Method of Control	WMS Required
Yes	Worker exposure to hazards due to poor housekeeping practices and inadequate access on site	☒ The entrance to the site will be clear at all times. ☒ Equipment and materials will not be left on the footpath. ☒ Signs will be displayed at the site entrance providing site inductions. ☒ A rubbish skip and / or a designated area will be provided for all general construction rubbish and waste materials and will be cleared when full. ☒ All rubbish is to be put into the rubbish skip or designated waster area before leaving the site each day. ☒ Excess material and equipment is not to be stored on scaffolding or within the access ways of the building. ☒ Materials and plant will be safely stored within the boundary fence and in specified locations. Where locations lot specified then materials and plant shall be stored clear of general access. ☒ Site supervisor will monitor housekeeping practices. ☒ Housekeeping information will be given to sub-contractors at pre-work meetings, discussions or in the Site Related Safety Policies. ☐ Other	No
Yes	Worker exposure to general site hazards	☒ Site supervisor shall ensure that all workers on site have provided evidence of General Safety Induction (Blue / White Card). A record of this will be maintained. ☒ Site supervisor shall ensure that all workers on site have provided with site induction (CHK 001). A record of this will be maintained. This is not required for housing construction work. ☒ Hard hats and safety boots will be worn at all times on site where required by signage. Signage indicating this requirement will be displayed at all site entrances. ☒ The site supervisor will monitor compliance. ☐ Other	Yes

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Yes	Lack of amenities on site	☒ Drinking water points will be established. ☐ An onsite temporary toilet will be provided until such time as a toilet connected to the sewerage is available. ☒ Washing facilities shall be provided. ☒ A sheltered area shall be provided. ☒ Other- Utilise existing toilets in building	No
No	Exposure to road traffic	☐ Provision of traffic control (Manual of Uniform Traffic Control Devices). ☐ A Traffic Management Plan (TMP) will be prepared and implemented. ☐ Other	

Environmental Conditions			
Applicable	Hazard	Method of Control	WMS Required
Yes	Exposure to noise	☒ Where possible use of equipment with silencers or other noise reduction devices. ☒ Locate workers away from noise source. ☒ Use of hearing protection (ear muffs or plugs). ☐ Other	Yes
Yes	Inadequate lighting to perform task	☒ Adequate lighting to be provided. ☐ Other	No
Yes	Exposure to dust	☒ Application of good housekeeping practices. ☒ Use of extraction units. ☒ Damping down of work areas. ☐ Other	Yes
Yes	Exposure to solar (UV) radiation	☒ Where possible work to be conducted in shaded areas. ☒ Scheduling of work. ☒ Wearing of appropriate clothing, hat, sun glasses and sunscreen. ☐ Other	No
Yes	Emissions of air pollutants from motor vehicles & plant	☒ Ensure maintenance of all subcontractor machinery to minimise & eliminate noxious emissions. ☒ Turn off equipment when not in use.	No

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No	Sediment laden water entering stormwater system or body of water	☐ Linear silt fencing installed downslope of effected areas and stockpiles. ☐ Fit geotextile fabric over stormwater grates etc. ☐ Sediment control measures to be left in place until site has been stabilised. ☐ Designated entry and exit point to site to have rock shaker and hose of vehicle if necessary.	No
Yes	Dust generated from vehicular movements on unsealed surfaces and all demolition works	☐ Designated vehicular access. ☒ Covering of loads when trucking from site (if material is not already wet). ☐ Damping down of work areas (sprinkler or water truck).	Yes
No	Damage to roots and trunks of trees	☐ Excavation under the drip line of trees will be done by hand, thrust boring or other approved method. ☐ No equipment or stockpiles will be placed under the canopy of any vegetation.	-
No	Unnecessary damage to vegetation	☐ Trees that are to be removed will be clearly marked. ☐ Any vegetation to be protected adjacent to the work area will be protected with exclusion fencing.	-
No	Yellow crazy ant (Is project in Bentley Park, Edmonton, Mount Peter, Russett Parkor Kuranda?)	☐ Contact Cairns regional council for current more detailed Infestation areas. ☐ Develop Yellow Crazy Ant management plan for site which complies with Cairns Regional Council and Wet Tropics management Authority requirements.	-

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Hazardous Substances and Dangerous Goods			
Applicable	Hazard	Method of Control	WMS Required
Yes	Worker exposure to hazardous substance risks to site	☒ A copy of a register of hazardous substances and dangerous goods used on site will be available from the site supervisor. ☒ SDS for all substances to be used will be recorded in a register. ☒ A risk assessment shall be conducted for all hazardous substances and Dangerous Goods. ☐ A work method statement for each hazardous substance will be prepared and kept on site. ☐ All relevant employees shall receive induction and training on the hazardous substances used on site. ☒ All containers for hazardous substances shall be correctly labelled. ☐ Other	Yes
Electrical			
Applicable	Hazard	Method of Control	WMS Required
No	Contact with overhead powerlines	☐ Contact Ergon Energy for definition of control measures. ☐ Application of exclusion zones and safety observer. ☐ A work method statement shall be prepared for working near electrical services. ☐ Other	-

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Machinery, Tools and Equipment			
Applicable	Hazard	Method of Control	WMS Required
Yes	Use of defective tools or equipment, including lack of guarding	☒ Site supervisor to monitor tools and equipment being used during site visits. ☒ Mobile plant operators shall inspect their plant daily. ☐ Other	Yes
Yes	Exposure to hazards associated with specialised construction plant & equipment (example; explosive power tools, welders, compressed air, conveyors, stressing jacks, lasers, high pressure water jets, etc.)	☒ Correct equipment for the task. ☒ Equipment in good condition. ☒ Competent / trained operator. ☒ Equipment used correctly. ☒ Personal Protective equipment worn. ☒ Signage & exclusion zones (where applicable). ☒ Ensure no unauthorised alterations or interference with plant. ☐ Other	Yes
Yes	Exposure to hazards associated with operation of cranes, hoists and lifting gear	☒ Correct plant for the task. ☒ Plant in good condition and records of maintenance and inspection maintenance. ☒ Competent and certified operators. ☒ Plant positioned and used correctly. ☒ Personal protective equipment worn. ☒ Signage & exclusion zones (where appropriate). ☒ A work method statement shall be prepared for working with cranes. ☐ Other	Yes
Yes	Persons being struck by mobile plant	☒ Where possible manual and mechanical work activities to be separated. ☒ Warning devices and signs in use. ☐ Traffic Control. ☒ Use of high visibility garments. ☒ A work method statement shall be prepared for selected mobile equipment. ☐ Other	Yes
Yes	Roll over of mobile plant	☒ Use of plant with roll over protection (ROPS). ☒ Wearing of seat belts. ☒ Application of gradient requirements for use. ☐ Other	Yes

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Yes	Vibration	☒ Use of mechanical means to minimise manual exposure. ☒ Use of vibration gloves. ☒ Rotation of workers. ☐ Other	Yes
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Manual Handling			
Applicable	Hazard	Method of Control	WMS Required
Yes	Worker exposure to manual handling hazards	☒ Use mechanical means (cranes, hoists, etc.) to assist in lifting. ☒ Use mechanical means (earthmoving equipment, etc.) to minimise manual work. ☒ Vary tasks to reduce exposure to repetitive movements. ☒ Workers to adopt good lifting technique. ☒ Order materials in smaller containers or bags. ☒ Workers to obtain help to lift heavy objects and materials. ☐ Other	Yes

Excavations and Trenches			
Applicable	Hazard	Method of Control	WMS Required
Yes	Worker exposure to underground services when performing excavation activities	☒ Identify the location and type of underground services before work starts. ☒ This information will be recorded and given to relevant sub-contractors during pre-work meetings and discussions.	Yes
Yes	Trench or excavation could collapse	☒ Safe trenching and excavation practices to be forced. ☒ A work method statement shall be prepared for all trenches 1.5 metres or greater in depth and shall be kept on site. ☐ Other.	Yes
Yes	Workers could fall into trench or excavation	☒ Trenches and excavations to be barricaded if left for a period of time unattended. ☐ Other	Yes

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Falling Objects			
Applicable	Hazard	Method of Control	WMS Required
Yes	Being struck by falling objects	☐ Scaffolding will have kick boards or brick guards. ☒ Sub-contractors will advise the site supervisor where work is to be done above others. This will also be discussed during pre-work meetings with the sub-contractors. ☒ Site supervisor will schedule work so work is not done above others. ☐ Other	Yes
Yes	Risk to public/persons in areas adjacent to/near construction site from falling objects	☒ Provided suitable protection including barricading / fencing / hoarding to ensure that materials, equipment or debris cannot be fall on or strike members of the public.	Yes

Working at Heights			
Applicable	Hazard	Method of Control	WMS Required
Yes	Falls from heights	☒ Safe work at height practices during all tasks onsite shall be enforced, including work from ladders. ☒ A work method statement shall be prepared for all work where a person could fall 2m or more. ☐ Identify all fall hazards & identify ways to control / manage associated risks. ☒ Provide scaffolding or other fall protection measures at the construction workplace before workers access areas at heights 2m or more. ☒ Where scaffolding is provided it will be fully decked and have handrails and brick guards as well as ladder access. ☐ Provide guard railing around exposed edges, such as stairwells and balconies, where a fall could occur. ☒ All floor penetrations through which a worker could fall is to be fitted with a fall protection. ☐ Other	Yes

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Formwork			
Applicable	Hazard	Method of Control	WMS Required
Yes	Collapse of formwork	☒ Formwork will be designed by qualified person. ☒ Formwork documentation shall be available on site. ☒ Erection, placement and stripping shall be conducted in accordance with formwork documentation. ☐ Other	Yes

Disturbance or Removal of Asbestos			
Applicable	Hazard	Method of Control	WMS Required
No	Exposure to asbestos fibres	☐ Comply with requirements of WH&S Regulations 1997 – Part 11 Asbestos, COP for the Management and Control of Asbestos in Workplaces and COP for the Safe Removal of Asbestos in Workplaces. ☐ A work method statement shall be prepared for all work involving asbestos shall be kept onsite.	-

Confined Spaces			
Applicable	Hazard	Method of Control	WMS Required
No	Exposure to hazards associated with working in confined spaces	☐ Comply with requirements of WH&S Regulations 1997 – Part 15 Confined Spaces and appropriate sections of AS/NZS 2865 safe working in confined spaces ☐ A work method statement shall be prepared for all work in a confined space and shall be kept onsite	-

Tilt up Construction			
Applicable	Hazard	Method of Control	WMS Required
No	Exposure to hazards associated with tilt up construction	☐ To be developed for specific work in accordance with Tilt up and Pre cast Construction Industry Code of Practice & AS 3850 – Tilt up Concrete Construction	-

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Steel Construction			
Applicable	Hazard	Method of Control	WMS Required
Yes	Exposure to hazards associated with steel construction	☒ To be developed for specific work in accordance with Steel Construction Advisory Standard	Yes
Demolition			
Applicable	Hazard	Method of Control	WMS Required
Yes	Exposure to hazards associated with demolition	☒ A work method statement shall be prepared for specific work.	Yes
Structural Alterations			
Applicable	Hazard	Method of Control	WMS Required
No	Collapse of structure	☐ Provision of temporary support. ☐ A work method statement shall be prepared for specific work.	-
Explosives			
Applicable	Hazard	Method of Control	WMS Required
No	Exposure to hazards associated with use of explosives	☐ A work method statement shall be prepared for specific work.	-

Form 018: Hazardous Substance / Dangerous Goods Risk Assessment

To be completed BEFORE using the hazardous substances on site	
EMERGENCY PLAN; 1. Notify VIS Construction Staff, 2. Contact Emergency Services	
Can this substance be substituted for a less hazardous product?	Yes ☐ No ☒
Can this product be used in accordance with the controls nominated in the manufacturer's MSDS? (If not, a detailed Safe Work Method Statement is required)	Yes ☒ No ☐
SUBSTANCE/S ASSESSED:	<i>Hanson Concrete, Premixed Concrete</i>
TASK/S:	Premixed concrete is used for a wide variety of building & construction applications
IDENTIFY HAZARDS FROM REVIEW OF MSDS:	Harmful by inhalation (applies to concrete dust). Harmful in contact with skin & if swallowed. May cause sensitisation by skin contact. Danger of serious damage to health by prolonged exposure through inhalation (applies to concrete dust).
CONTROL MEASURES TO BE USED:	Wear suitable protective clothing, safety footwear, gloves & eye/face protection. Always wash hands before eating, drinking, smoking or using the toilet. Exposure to dust should be kept as low as practicable. Work areas should be cleaned regularly. Do not breathe dust. Dust is best cleaned up by vacuum device to avoid making dust airborne. Wetting down before sweeping up dust may be a useful control measure.
ENVIRONMENTAL ISSUE:	Do not empty into drains Prevent spillage or wash down water from entering sewers, drains, storm water and watercourses. If contamination of drains or watercourses has occurred, advise the relevant state environmental protection agency and the company.
MONITORING & REVIEW PROCESS:	Site supervisor to monitor usage procedure & review if necessary.
FURTHER ACTIONS REQUIRED:	TARGET DATES:
-	MSDS needs to be updated every 5 years after date of issue.



Name	Signature	Date of Assessment

Include details of all workers who will be using and have received information of the hazardous substance.

[illegible]

Trainer's Name	Signature	Date of training

Form 005
Hazard Report



Purpose and Scope

This document applies to all employees and is used when workers have identified a potential **hazard** that cannot be simply and immediately fixed. Health and safety legislation requires employees to **report hazards** to their supervisor. The immediate **hazard** reporting process allows employees to **report hazardous** conditions or practices as they notice them. A hazard is something that can cause harm, e.g. electricity, chemicals, working up a ladder, noise, a keyboard, a bully at work, stress, etc.

References

Project Management Plan (PMP)

PR 004 – Site Safety Control (Procedure)

PR 003 – Managing Accidents, Incidents & First Aid

CHK 001 – Site Induction (Checklist)

CHK 008 – Project Risk Assessment

HAZARD REPORT NO:

To be completed by the person detecting the hazard etc.: _____

Description of hazard / condition / damage: _____

Location / Workplace: _____

Day: _____ Month: _____ Year: _____ Time of incident: _____ am / pm

Risk Level ☐ High ☐ Medium ☐ Low

Recommended action: _____

Signature: _____

Date: _____

To be completed by Workplace Management

Hazard report received by: _____

Name (please print): _____

Signature: _____

Day: _____ Month: _____ Year: _____ Time of incident: _____ am / pm

Form 005
Hazard Report



Action taken: _____

By whom: _____

When: _____

Has the hazard / issue been: Eliminated: ☐ Yes ☐ No Controlled: ☐ Yes ☐ No

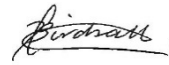
Any further action required: _____

Signature: _____

Date completed: _____



Safe Work Method Statement (SWMS) SWMS [Number and Name]

Activity:	SWMS #:	
Business Name: Vis Constructions Pty Ltd	ABN #: 93 105 871 654	
Business Address: 5/206 McCormack Street, Manunda Q. 4870	Contact #: 07-4053 1114	
Project Name:	Project Address:	
SWMS Approved by:		
Name: Luke Vis		
Signature: 	Date:	
Person/s responsible for ensuring compliance with SWMS: Luke Vis	Relevant Legislation & Codes of Practice to be complied with:	
Person/s responsible for reviewing the SWMS: Luke Vis and Cassandra Birdsall	Review Due:	
Relevant workers consulted in the development, approval and communication of this SWMS.		All Persons involved in the task must have this SWMS communicated to them before work commences
Name	Signature	Date
Keith Vis		
Luke Vis		
Cassandra Birdsall		

Daily Tool Box Talks will be undertaken to identify, control and communicate additional site hazards.
Work must cease immediately if incident or near miss occurs. SWMS must be amended in consultation with relevant persons.
Amendments must be approved by **Luke Vis** and communicated to all affected workers before work resumes.
SWMS must be made available for inspection or review as required by WHS legislation. Record of SWMS must be kept as required by WHS legislation (until job is complete or for 2 years if involved in a notifiable incident).

Safe Work Method Statement (SWMS)

SWMS [Number and Name]

THIS WORK ACTIVITY INVOLVES THE FOLLOWING "HIGH RISK CONSTRUCTION WORK"

- | | | | |
|---|---------------------------------------|---|---|
| ☐ Confined Spaces | ☐ Mobile Plant | ☐ Demolition | ☐ Asbestos |
| ☐ Using explosives | ☐ Diving work | ☐ Artificial extremes of temperature | ☐ Tilt up or pre-cast concrete |
- ☐ Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services
- ☐ Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse
- ☐ Involves a risk of a person falling more than 2m, including work on telecommunications towers
- | | |
|--|---|
| ☐ Working at depths greater than 1.5 Metres, including tunnels or mines | ☐ Work in an area that may have a contaminated or flammable atmosphere |
| ☐ Work carried out adjacent to a road, railway or shipping lane, traffic corridor | ☐ In or near water or other liquid that involves risk of drowning |

PERSONAL PROTECTIVE EQUIPMENT (PPE)

FOOT PROTECTION



☐

HEARING PROTECTION



☐

HIGH VISIBILITY



☐

HEAD PROTECTION



☐

EYE PROTECTION



☐

FACE PROTECTION



☐

HAND PROTECTION



☐

PROTECTIVE CLOTHING



☐

BREATHING PROTECTION



☐

SUN PROTECTION



☐

FALL ARREST



☐

Rings, watches, jewellery that may become entangled in machines must not be worn. Long and loose hair must be tied back.

☐

Safe Work Method Statement (SWMS)
SWMS [Number and Name]



JOB STEPS	POTENTIAL HAZARDS/s	CONTROL MEASURES TO REDUCE RISK	RESPONSIBLE PERSON



Safe Work Method Statement (SWMS) SWMS [Number and Name]

REVIEW NO.	1	2	3	4	5	6	7	8	9	10
NAME:	Cassandra Birdsall									
INITIAL:	CB									
DATE:										

This SWMS has been developed in consultation and cooperation with *employee/workers* and relevant *Employer/Persons Conducting Business or Undertaking (PCBU)*. I have read the above SWMS and I understand its contents. I confirm that I have the skills and training, including relevant certification to conduct the task as described. I agree to comply with safety requirements within this SWMS including risk control measures, safe work instructions and PPE described.

NAME	QUALIFICATION REQUIRED FOR THIS ACTIVITY	SIGNATURE	DATE	EMPLOYER

Hazard and Risk Planning, Identification, Assessment and Control

Purpose and Scope

The main purpose of this procedure is to ensure that all hazard and risks that the Company has a control over or can influence are identified, assessed, controlled and evaluated. This procedure covers the way in which hazards and risks are identified, assessed, controlled and evaluated to ensure the control of hazards or risks on site.

Responsibilities

Compliance, monitoring and review

Compliance Manager is the subject matter expert and process owner responsible for approving this document.

Project Manager is responsible for ensuring all potential hazards and risks are identified, recorded, reported and included in the Project Management Plan.

Office Administrator is responsible for maintaining this document and maintaining any associated records.

All employees must report to the Manager any potential hazards in the workplace.

Definitions, Abbreviations and Acronyms

Hazard: A hazard is a source or a situation with the potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.

Risk: A probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through pre-emptive action.

SDS: Safety Data Sheet.

References

Construction Work Code of Practice

Work Health and Safety Act (the WHS Act).

CHK 001 – Site Specific Induction

CHK 008 - Project Risk Assessment

Project Management Plan (PMP)

PR 003 – Managing Accidents, Incidents & First Aid

PR 004 – Site Safety Control

CHK 001 – Site Specific Induction

FRM 003 - Hazardous Subs. / SDS Register

FRM 005 – Hazard Report Form

FRM 010 Job Safety Environment Analysis – SWMS **Monthly Site Inspection** (Procore Inspection)

Plant and Equipment Regular Checklist/Inspection (Procore Inspection)

New Weekly Site Supervisors Inspection (Procore Inspection)

APPENDIX 1

Safety Risk Matrix

Environmental Risk Matrix

Hazard and Risk Planning, Identification, Assessment and Control

Planning

The Director and General Manager and Compliance Manager/s shall identify the general hazards and risks involved in the process of works conducted by the Company during the Management Review Meetings.

The identification of such hazards/risks shall be determined in relation (but not limited) to:

- Occupational Health and Safety.
- Environmental Management.

When new hazards/risks are identified, the **FRM 005** Hazard Report Form is to be completed by the person who identified the hazard / risk. The management team will assess the Form and determine if any new processes, procedures, forms or **FRM 10** Job Safety and Environment Analysis (JSEA) / Safe Work Method Statements need to be developed and implemented to control or eliminate the hazard/risk.

Any new processes or documentation shall be conveyed to all relevant personnel during Staff Meetings, Site Inductions or Tool Box meetings prior to work on a new site.

Planning for a New Work Site

The Director, Compliance Manager/s, and Project Manager shall conduct a site inspection prior to any work beginning on site.

The Director, Compliance Manager/s, and Project Manager shall identify any new hazards/risks involved in the process of works for that site.

When new hazards/risks are identified, the **FRM 005** Hazard Report Form is to be completed by the person who identified the hazard / risk. The management team will assess the Form and determine if any new processes, procedures, forms or **FRM 10** Job Safety and Environment Analysis (JSEA) / Safe Work Method Statements need to be developed and implemented to control or eliminate the hazard/risk.

Sub-contractors will be required to submit their own Safe Work Method Statements to cover the trade / work they are completing on site.

Hazard / Risk Identification

Hazard identification is the process used to identify all possible situations in the workplace where people may be exposed to injury, illness or disease.

The first step in the risk management process is to identify the hazards associated with construction work. Examples of hazards include:

- the construction workplace itself, including its location, layout, condition and accessibility
- the use of ladders, incorrectly erected equipment, unguarded holes, penetrations and voids, unguarded excavations, trenches, shafts and lift wells, unstable structures such as

Hazard and Risk Planning, Identification, Assessment and Control

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- incomplete scaffolding or mobile platforms, fragile and brittle surfaces such as cement sheet roofs, fibreglass roofs, skylights and unprotected formwork decks
 - falling objects, for example tools, debris and equipment
 - collapse of trenches
 - structural collapse
 - the handling, use, storage, and transport or disposal of hazardous chemicals
 - the presence of asbestos and asbestos-containing materials
 - welding fumes, gases and arcs
 - hazardous manual tasks
 - the interface with other works or trade activities
 - the physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation, static electricity or a contaminated atmosphere, and the presence of a confined space.

Initially, the Director, Compliance Manager/s, and Project Manager, employees and relevant consultants shall be used to determine potential hazards / risks in the workplace. All currently identified hazards / risks shall undergo an assessment using the Risk Score Calculator.

When a hazard or risk has been identified by other personnel, Director, Compliance Manager/s, and Project Manager shall ensure that a complete assessment is conducted using the Risk Score Calculator. A risk assessment is not necessary if the risk and how to control it is already known.

Recording of Hazards/Risks

The Compliance Manager/s and Project Manager shall ensure that all hazards/risks identified via the **FRM 005** Hazard Report Form and their subsequent control methods are documented in the Project Management Plan.

If it is determined by Management that a **FRM 10** Job Safety and Environment Analysis (JSEA) / Safe Work Method Statement needs to be developed and approved by Compliance Manager/s and Project Manager prior to implementation on site.

Hazard / Risk Assessment

Risk Assessment is the process used to determine the likelihood that people may be exposed to injury, illness or disease in the workplace arising from any situation identified during the hazard identification process.

Assessing the risk includes considering:

- The severity of any injury or illness that could occur, for example is it a small isolated hazard that could result in a very minor injury or is it a significant hazard that could have wide ranging and severe affects, and
- The likelihood or chance that someone will suffer an illness or injury, for example consider the number of people exposed to the hazard.

Hazard and Risk Planning, Identification, Assessment and Control

Under the WHS Regulations, a risk assessment is not mandatory for construction work however it is required for specific situations, for example when working with asbestos. In many circumstances a risk assessment will assist in determining the control measures that should be implemented.

It will help to:

- identify which workers are at risk of exposure
- determine what sources and processes are causing that risk
- identify if and what kind of control measures should be implemented
- check the effectiveness of existing control measures.

A risk assessment is not necessary if the risk and how to control it is already known.

When hazards have been identified, assessments should be completed. Using the Risk Score Calculator, each hazard will be individually assessed to determine the level of risk involved. When deciding the level of risk involved with a particular hazard, both the frequency of the task and the threat of serious injury will be considered. Hazards shall be classified into one of three categories.

- **Low** – Potential hazard (can be rectified easily and is acceptable);
- **Medium** – Significant risk (requires appropriate control measures implemented to become acceptable);
- **High** – Major hazard (requires immediate rectification and no work to be carried out with this risk score).

All hazards identified shall be assessed and associated risks shall be documented in the relevant Forms and Project Management Plan.

Control of Hazards / Risks

Risk control is the process used to identify all practicable measures for eliminating or reducing the likelihood of injury, illness or disease in the workplace, to implement the measures and to continually review the measures in order to ensure their effectiveness.

All risks identified through the assessment shall be controlled by remedial action where possible or eliminated at the source, if appropriate.

Where elimination of the risk is practicable, this shall be the first course of action.

The hierarchy of control should be considered in determining suitable methods of controlling identified hazards. The hierarchy on control includes:

- **Elimination** - This means removing the hazard or hazardous work practice from the workplace. This is the most effective control measure and must always be considered before anything else.
- **Substitution** - Minimise the risk by substituting or replacing a hazard or hazardous work practice with a less hazardous one.
- **Isolation** - Minimise the risk by isolating or separating the hazard or hazardous work practice from people

Hazard and Risk Planning, Identification, Assessment and Control

-
- **Mechanical/Engineering Controls** - Engineering controls are physical control measures to minimise risk.
 - **Administrative Controls** - Administrative controls should only be considered when other higher order control measures are not practicable, or to increase protection from the hazard. These are work methods or procedures that are designed to minimise the exposure to a hazard, such as ensuring there is no unauthorised entry of a person to a work area.
 - **Personal Protective Equipment** - (Note: PPE should be considered as a final control measure when all other options have been explored and evaluated not to be practicable). PPE is the lowest order control measure in the hierarchy of controls. PPE should also only be considered when other higher order control measures are not reasonably practicable or to increase protection from the hazard. PPE relies on the proper fit and use of the PPE and does nothing to change the hazard itself. It therefore requires thorough training and effective supervision to ensure compliance and effectiveness.

A **FRM 10** Job Safety and Environment Analysis (JSEA) / Safe Work Method Statement shall be developed that outlines the controls needed for the particular task.

The Sub-contractor shall ensure that all plant and equipment is scheduled for testing / calibration.

The sub-contractor shall ensure that all personnel working on or near plant shall be issued with Personal Protective Clothing and relevant safety equipment.

Hazard and Risk Planning, Identification, Assessment and Control

Appendix 1

Safety Risk Matrix

LEGEND: → ¶

E=Extreme-risk → Immediate action required, activity must not start or be stopped if started. Highest level of Management needs to be involved¶
 H=High-risk → Senior management attention needed to control the risk. Senior Management needs to be involved¶
 M=Moderate-risk → Complete risk assessment. Identify hazards and implement controls. Management responsibility must be specified¶
 L=Low-risk → Identify hazards and implement controls. Manage by routine processes¶

LEVEL¶	DESCRIPTOR¶	DESCRIPTION¶
5¶	Almost certain¶	The event is expected to occur more than once per year¶
4¶	Likely¶	The event does occur about once in ten years¶
3¶	Moderate¶	The event occurs once in every 10-100 years¶
2¶	Unlikely¶	The event occurs once every 100—1,000 years¶
1¶	Rare¶	The event occurs once every 1,000—10,000 years¶

CONSEQUENCE¶	DESCRIPTION¶
Extreme¶	Fatality/Permanent Disability; plant damage in excess of \$1,000,000; loss of productivity < 5 days; toxic environmental release off-site with detrimental effects¶
Major¶	Extensive injuries. Moderate irreversible impairment/injuries; plant damage exceeds \$100,000; loss of productivity 1 to 5 days; loss of production; environmental release off-site with no detrimental effects;¶
Moderate¶	Reversible impairment/injuries; plant damage below \$100,000; interruption to productivity; environmental release immediately contained¶
Minor¶	Minor injuries; low plant damage; minor loss of productivity; no environmental impact¶
Insignificant¶	No lost time, less than 5k damage, less than 5k delay or reworks, no environmental effects¶

LIKELIHOOD¶	CONSEQUENCES¶				
	INSIGNIFICANT¶ 1¶	MINOR¶ 2¶	MODERATE¶ 3¶	MAJOR¶ 4¶	EXTREME¶ 5¶
5-(Almost certain)¶	M(11)¶	M(16)¶	H(20)¶	E(23)¶	E-(25)¶
4-(Likely)¶	L(7)¶	M(12)¶	H(17)¶	H(21)¶	E(24)¶
3-(Moderate)¶	L(4)¶	M(8)¶	M(13)¶	H(18)¶	H(22)¶
2-(Unlikely)¶	L(2)¶	L(5)¶	M(9)¶	H(14)¶	H(19)¶
1-(Rare)¶	L(1)¶	L(3)¶	M(6)¶	M(10)¶	H(15)¶

Environmental Risk Matrix

Environmental Risk Matrix					
Likelihood	Consequence				
	Harmless - no potential to cause harm, correctable	Mild - little potential for harm, easily correctable	Moderate - somewhat harmful, correctable	Serious - harmful but not potentially fatal, difficult to correct but recoverable.	Severe/catastrophic - very harmful or potentially fatal: requires great effort to correct and recover
Very Likely	M8	H16	H18	H21	H25
Likely	M7	M10	H17	H20	H24
Moderate	L3	M9	M12	H19	H23
Low	L2	L5	M11	M14	H22
Remote	L1	L4	L6	M13	M15