

Epoxy Resins Flooring

Business Name:		ABN:
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	



RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change	
								PPE	

Risk Rating & Required Action:	
4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **PPE**

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Governance, Legal Compliance and WHS Duties	<ul style="list-style-type: none"> Lack of clear governance structure for epoxy flooring works leading to non-compliance with WHS Act 2011 and WHS Regulation Failure to identify and document epoxy resin works as hazardous chemical use in the PCBU's WHS management system Inadequate consultation with workers and health and safety representatives about epoxy flooring systems and associated health risks Absence of documented due diligence by Officers in relation to hazardous chemicals, airborne contaminants and respiratory sensitisers Poor integration of contractor management for epoxy installers into existing WHS governance systems No process to review legislative or standards changes relating to epoxies, isocyanates and silic dust 	High	<ul style="list-style-type: none"> Establish and document a WHS governance framework that explicitly identifies epoxy resins flooring as a hazardous chemical and high-risk health exposure activity under the WHS Act 2011 and WHS Regulation Assign clear WHS roles, responsibilities and accountabilities for epoxy-related work (PCBU, Officers, managers, supervisors, HSRs, contractors) within the WHS management system Incorporate epoxy resins flooring into the organisation's WHS policy, chemical management procedure and health monitoring procedure, ensuring these documents reference relevant Australian legislation, Codes of Practice and Standards Implement a formal process to verify officer due diligence, including periodic reporting to the Board or senior management on epoxy-related risks, incidents, health monitoring outcomes and compliance status Establish documented consultation and communication mechanisms (WHS committees, toolbox talks, safety alerts) specifically addressing epoxy health risks, respiratory sensitisers and long-term health effects Integrate epoxy flooring contractors into the organisation's WHS governance framework, requiring them to meet or exceed the host PCBU's WHS standards, policies and reporting requirements Create legislative and standards register for hazardous chemicals, including epoxy systems and associated solvents, and assign responsibility for monitoring updates to WHS legislation, Codes of Practice and relevant Australian Standards Require formal approval of any new epoxy product or system through a WHS risk review process before use on site Schedule periodic independent or internal WHS audits focusing on hazardous chemicals and epoxy flooring controls to verify compliance with the WHS Act 2011 and WHS Regulation 	Medium
2. Procurement and Supply Chain Management of Epoxy Systems	<ul style="list-style-type: none"> Procurement of epoxies, hardeners and solvents without WHS review, resulting in uncontrolled introduction of hazardous chemicals Selection of products with unnecessary levels of volatile organic compounds (VOCs), isocyanates or sensitisers due to cost-driven purchasing decisions Incomplete or missing Safety Data Sheets (SDS) from suppliers, or SDS not compliant with current Australian requirements Supply of incompatible or low-quality PPE, respiratory protection or ventilation equipment not suited to the selected epoxy system Inadequate consideration of curing times, off-gassing and ventilation 	High	<ul style="list-style-type: none"> Develop and implement a formal hazardous chemical procurement procedure that mandates WHS risk review of epoxy resins, hardeners, primers and associated additives prior to purchase Require provision and WHS review of current (within 5 years) Australian-compliant SDS for all epoxy products before approval for use Incorporate WHS performance and chemical hazard criteria into supplier selection and evaluation, including VOC content, presence of isocyanates, skin/respiratory sensitisers and flammability Preferentially select lower-hazard formulations (e.g. low-VOC, solvent-free or water-based epoxy systems) where they are fit for purpose, documented through a formal substitution assessment Ensure procurement specifications for epoxy systems include minimum performance standards for engineering controls and PPE (e.g. specified respiratory protection class, glove material, coveralls type, ventilation requirements) Integrate requirements for suppliers and contractors to demonstrate their WHS management systems, including training programs, health monitoring regimes and incident reporting for epoxy-related work Establish a centralised chemical approval register for all epoxy products, recording hazard classification, approved uses, required controls and expiry dates 	Medium

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	<ul style="list-style-type: none"> requirements during product selection, leading to prolonged exposure risks No process to verify that suppliers and subcontractors have robust WHS and chemical management systems Bulk purchasing and storage of large quantities of epoxy systems without considering storage, segregation, spill containment and expiry dates 		<ul style="list-style-type: none"> Include contractual clauses requiring suppliers to notify the PCBU of any product reformulation, changes to hazard classification or updated SDS versions Implement a stock management system that controls quantities, ensures correct segregation and storage conditions, and prevents the use of out-of-date epoxy components 	
3. Hazardous Chemicals Identification, SDS and Labelling Systems	<ul style="list-style-type: none"> Epoxy resins, hardeners, solvents and thinners not correctly identified or registered as hazardous chemicals Outdated, inaccessible or missing SDS for epoxy components at the point of use Inconsistent or non-compliant container labelling, including decanted or mixed products, creating a risk of misuse or incompatible mixing Workers and contractors not familiar with critical health hazard information such as sensitisation, carcinogenicity or chronic respiratory effects Failure to identify secondary hazards such as flammability, explosion risk in confined spaces and incompatible materials No centralised hazardous chemical register covering all epoxy systems used across sites 	High	<ul style="list-style-type: none"> Establish and maintain a central hazardous chemicals register that includes all epoxy products, hardeners, primers, solvents and related materials used by the PCBU and its contractors Ensure current, up-to-date, compliant SDS for all epoxy-related products are readily accessible (physically and electronically) at each workplace where they are used, stored or handled Implement documented procedure for receiving, reviewing and updating SDS, including a scheduled review at least every 5 years or when products change Develop and enforce a labelling and decanting procedure aligned with WHS Regulation requirements, ensuring all primary and secondary containers for epoxy products remain clearly and correctly labelled Provide structured induction and refresher training for workers and contractors on interpreting SDS and labels, with emphasis on health hazards, exposure routes and required control measures Use hazard pictograms, signage and colour-coding systems in storage and mixing areas to communicate epoxy-related hazards clearly Conduct periodic inspections and audits to verify correct labelling, presence of SDS and maintenance of the hazardous chemicals register for epoxy systems Integrate identification of epoxy hazards into pre-start risk reviews, chemical risk assessments and project planning documentation 	Low
4. Risk Management, Planning and Design of Epoxy Flooring Works	<ul style="list-style-type: none"> Inadequate preliminary risk assessment for epoxy flooring projects, particularly regarding ventilation, confined spaces and adjacent occupancy Failure to consider design and planning options that could eliminate or reduce epoxy use or exposure durations Poor integration of epoxy flooring risks into project WHS plans and construction methodologies 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> • Overlapping activities and trades in the same area increasing exposure to fumes, vapours and sensitising agents • Inadequate planning for segregation, exclusion zones and curing periods, resulting in building occupants or other workers being exposed • No formal assessment of fire, explosion or electrical risks in areas where flammable epoxy solvents or vapours may accumulate 		[REDACTED]	
5. Training, Competency and Supervision Systems	<ul style="list-style-type: none"> • Workers and contractors applying epoxy flooring without adequate training in hazardous chemical handling, health risks and control measures • Supervisors lacking competency to monitor compliance with ventilation, PPE and exposure controls • Inconsistent induction processes leading to variable understanding of epoxy-specific risks and controls • No verification of competency for specialised tasks such as respiratory protection use, fit testing and confined space work associated with some epoxy applications • Informal, undocumented on-job training that fails to cover chronic health risks such as sensitisation and occupational asthma • Limited understanding among workers of early signs and symptoms of epoxy-related health effects and required reporting pathways 	High	[REDACTED]	Medium
6. Ventilation, Air Quality and Exposure Control Systems	<ul style="list-style-type: none"> • Inadequate general and local ventilation leading to accumulation of epoxy vapours and solvents above safe exposure levels • No system for assessing and monitoring airborne contaminants, 	High	[REDACTED]	Medium

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	<p>particularly in enclosed or semi-enclosed areas</p> <ul style="list-style-type: none"> • Reliance on natural ventilation without verification that it meets exposure control requirements • Failure to consider interaction between ventilation systems and other building services, potentially spreading contaminants to occupied areas • Insufficient planning for maintaining ventilation during curing phases when off-gassing continues • No system to identify when respiratory protection must be upgraded due to inadequate ventilation 		[REDACTED]	
7. Personal Protective Equipment and Respiratory Protection Programs	<ul style="list-style-type: none"> • Inadequate or incorrect selection of gloves, coveralls, eye protection and respiratory protection equipment (RPE) for the specific epoxy system • No formal respiratory protection program, leading to poor fit, maintenance and use of RPE • Failure to manage facial hair, fit-testing and seal checks for tight-fitting respirators • PPE policies not integrated with training, supervision and disciplinary procedures • Insufficient supply, cleaning and replacement systems for contaminated PPE, leading to dermal exposure and cross-contamination • No system for ensuring visitors or occasional workers entering epoxy work zones are appropriately protected 	High	[REDACTED]	Medium

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			[REDACTED]	
8. Health Monitoring, Medical Surveillance and Worker Health Management	<ul style="list-style-type: none"> Lack of health monitoring for workers who may be exposed to epoxy sensitisers, solvents and respiratory irritants Delayed identification of occupational asthma, dermatitis or sensitisation related to epoxy exposure No formal process for assessing fitness for work for individuals with pre-existing respiratory or skin conditions Inadequate recording and follow-up of health complaints, symptoms or medical restrictions related to epoxy work Insufficient communication between the PCBU, treating medical practitioners and occupational health providers regarding epoxy-related issues 	High	[REDACTED]	Medium
9. Storage, Handling and Waste Management Systems	<ul style="list-style-type: none"> Inappropriate storage of epoxy components and solvents leading to leaks, spills, incompatible chemical reactions or fire risk No formal system for controlling access to epoxy storage areas, resulting in untrained personnel handling hazardous products Poor management of mixed but unused epoxy, contaminated containers and solvent waste Inadequate spill preparedness, including lack of spill response plans, materials and training 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Environmental contamination risks from incorrect disposal practices or uncontrolled wash-down of equipment 		[REDACTED]	
10. Contractor Management and Multi-PCBU Coordination	<ul style="list-style-type: none"> Inconsistent control standards where epoxy flooring works are performed by external contractors under multiple PCBUs Lack of clarity regarding which PCBU controls specific risks such as ventilation, exclusion zones and after-hours access Inadequate exchange of information about epoxy products, SDS, health risks and site-specific conditions between host PCBU and contractors Contractors using unapproved products or methods that do not align with the host PCBU's WHS management system Poor coordination of scheduling and access, leading to simultaneous occupancy and uncontrolled exposure of other workers or building users 		[REDACTED]	Medium
11. Emergency Preparedness, Incident Response and First Aid	<ul style="list-style-type: none"> Lack of specific emergency procedures for epoxy-related incidents such as large spills, acute inhalation exposure or skin/eye contact Inadequate first aid provisions, including eyewash facilities and skin decontamination resources in epoxy work areas 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> Workers and supervisors unaware of appropriate responses to over-exposure, allergic reactions or respiratory distress No structured process for investigating and learning from epoxy-related incidents, near misses or health complaints Insufficient coordination with building management, emergency services and neighbouring tenants regarding potential epoxy emergencies 		[REDACTED]	
12. Monitoring, Review, Consultation and Continuous Improvement	<ul style="list-style-type: none"> Static WHS management approach with no ongoing review of epoxy-related risks and controls Lack of worker consultation leading to under-reporting of health complaints, near misses and practical issues with controls Insufficient performance indicators and data analysis for epoxy exposure incidents and compliance with controls Failure to incorporate lessons learned from internal and external incidents, audits and regulatory guidance into epoxy management systems No systematic review of the suitability of products and technologies as safer alternatives become available 	Medium	[REDACTED]	Low

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SAMPLE

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory

Work Health and Safety Act 2011
 Work Health and Safety Regulations 2011
 Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>
 Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>
 Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>
 Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

Victoria

Occupational Health and Safety Act 2004
 Occupational Health and Safety Regulations 2017
 Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>
 Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

New South Wales

Work Health and Safety Act 2011
 Work Health and Safety Regulations 2025
 Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>
 Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

Western Australia

Work Health and Safety Act 2020
 Work Health and Safety Regulations 2022
 Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>
 Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011
 Work Health and Safety (National Uniform Legislation) Regulation 2011
 Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>
 Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

Safe Work Australia Links

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>
 Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

South Australia

Work Health and Safety Act 2012 (SA)
 Work Health and Safety Regulations 2012 (SA)
 Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>
 Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

Tasmania

Work Health and Safety Act 2012
 Work Health and Safety (Transitional and Consequential Provisions) Act 2012
 Work Health and Safety Regulations 2012
 Work Health and Safety (Transitional) Regulations 2012
 Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>
 Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.