This guide provides an overview on how to complete a Hazardous Chemical Risk Assessment. The sections of the risk assessment are outlined, and brief instructions on the information required is provided. Please consult the Risk assessment procedure for further detail.

Details

Should include information about the person completing the risk assessments and the campus where the chemical is to be used.

Project details

Include a description of the project or task. Details of how the chemical will be used should be included to allow the assessor to determine if the safety controls are applicable.

Hazardous Chemical Information

This should include the identification names (chemical and common names) of the chemicals, maximum quantity or volume purchased, stored, and used. This section also requires a brief information on the details of the use of chemicals.

HAZARDOUS CHEMICALS INFORMATION
Name of chemical: Click or tap here to enter text.
Maximum volume which will be purchased / stored at any one time? Click or tap here to enter text.
Maximum volume which will be used each time Click or tap here to enter text.
Maximum volume expected be purchased over the life of the project or task?Click or tap here to enter text.

Substance properties

Using the SDS for the chemical, tick the boxes provided to identify the chemical properties, using section 2 of the SDS. Tick the boxes provided to identify and hazardous properties, GHS symbols or hazard statements. See link for how to understand an SDS. Each hazardous substance or hazard type must be added to the Risk assessment table below.

SUBSTANCE PROPERTIES			
Indicate which of the following properties are relevant to the chemical being purchased, used or stored.			
Carcinogenic	☐	Corrosive	☐
Explosive	☐	Environmentally sensitive	☐
Flammable	☐	Gas	☐
Irritant	☐	Mutagenic	☐
Oxidiser	☐	Toxic	☐
Other: (please list)	☐		☐

Administrative/legislative requirements

In this section it should be determined what administrative or legislative requirements apply to the chemical.

Consult the SDS for the chemical as a starting point. In addition, please see below.

- For chemicals that are being imported it is important to consult regulatory bodies (e.g. AICIS, TGA and APVMA) for permit or registration requirements
- For Security sensitive substances consult SafeWork NSW
- Information on Concessional spirits can be obtained from the ATO and section 17.5 of this manual

ADMINISTRATIVE / LEGISLATIVE REQUIREMENTS			
Indicate which of the following administrative / legislative requirements are relevant to the chemical being purchased, used or stored.			
AQIS product	☐	Concessional spirit	☐
Health surveillance required	☐	Licence / permit conditions apply	☐
Neutralisers / antidotes required	☐	Prohibited substance	☐
Scheduled substance, drug or poison	☐	Security sensitive substance	☐
Manufacturer's Safety Data Sheet	☐	Training required	☐
Industrial Chemical Introduction/Imported chemical	☐	Other: (please list)Click or tap here to enter text.	☐

Environmental / PPE Requirements

Consult the chemical SDS and identify which environmental and PPE requirements are necessary for safe handling of the chemical.

- Biological safety cabinet – if required, details of the hazard should be identified in risk assessment.
- Laminar flow cabinet – if required, details of the hazard should be identified in risk assessment.
- Fume cabinet – should be used for chemicals requiring ventilation as per the SDS.
- Gloves – the risk assessment should specify the **type of gloves requires**. For chemicals that require the use of gloves, the chemical rating of the gloves (e.g. degradation and permeation breakthrough times) should be considered.
- Respirator – if a respirator is required as per the SDS, specific details of the respiratory type and usage instructions should be outlined in the hazards section of the risk assessment.
- Specific safety equipment – details should be provided, including how the equipment should be used.

Storage/Disposal requirements

Use the checklist prompts to evaluate the storage and disposal requirements for the chemical. When a box is ticked in this section of the risk assessment, specific detail **must** be included in the risk assessment under 'Hazards' section.

For example:

- Consult the SDS to determine appropriate storage requirements. Risk assessment must indicate that suitable storage has been identified and

location detailed on chemical risk assessment (included building, room, DG cabinet, bench etc)

- Consult the SDS to determine how the chemical should be disposed of. Specific detail of how the chemical will be disposed of should be included in the risk assessment (i.e. do not just give generic advice of following local regulations- be specific). The FOSH waste disposal procedure outlines practices for disposal of chemicals and should be referred to in determining the correct method of disposal for the facility where the chemical is used.
- Chemical incompatibilities should be considered when determining the location of storage for the chemical. An incompatibility check can be run in ChemFFX to determine if the chemical being assessed can safely be stored in the desired location.
    - to run an incompatibility report in ChemFFX, locate the area (e.g. flammables cabinet) where the chemical will be stored, select 'Filters' and from the dropdown menu select 'Incompatibility report'.

STORAGE / DISPOSAL REQUIREMENTS	
Indicate which of the following storage / disposal requirements are relevant to the chemical.	
Suitable storage has been identified and location detailed below (including building, room, DG cabinet, bench etc.) **Campus** Click or tap here to enter text. **Building** Click or tap here to enter text. **Room** Click or tap here to enter text. **Location** Click or tap here to enter text.	☐
Chemical has a restricted access or specific storage requirement	☐
Chemical has a limited usage or storage period	☐
Chemical to be handled or stored within a particular temperature range	☐
Chemical becomes unstable, decomposes, or changes creating a different hazard or increased risk	☐
Chemical is incompatible with other substances	☐
The chemical may generate atmospheric emissions which are toxic, corrosive, flammable, explosive or asphyxiant	☐
Specific spill containment procedures apply	☐
Chemical is of security concern and has security risks of access to the substance by unauthorised persons or unauthorised activities?	☐
Chemical Disposal requirements?	☐

Risk Assessment: Hazards

In this section, ALL hazards associated with the chemical should be addressed.

RISK ASSESSMENT			
Hazard	**Proposed controls** (What will be done to eliminate or reduce the risk?)	**Risk rating**	**Control type**

Hazards

- For any of the marked/ticked items in the previous sections of the form, please include specific details in the risk assessment section (e.g PPE requirements, storage/disposal, permit requirements).
- The standard risk controls may provide approved standard controls that should be implemented for some hazards, however specific risk controls for the hazardous chemical being assessed should also be included in detail.
- Consult SDS for hazards relating to the chemical – See section 2 of the SDS.
    - Example: Corrosive acid

Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

Physical hazards	
Oxidizing liquids	Category 3
Substances/mixtures corrosive to metal	Category 1
Health hazards	
Skin Corrosion/Irritation	Category 1 A
Serious Eye Damage/Eye Irritation	Category 1
Environmental hazards	
No hazards identified	

Label Elements

Flame Over Circle

Corrosion

Proposed controls

- Consider what controls are already in place to reduce the risk associated with the hazard. Consult Standard risk controls, however **specific details of the PPE, labelling, storage, handling requirements MUST be addressed in the hazardous chemical risk assessment.**

Risk rating

Use the Risk Rating Matrix to identify the risk rating. You will need to identify the likelihood of the consequence occurring with the proposed controls in place and the possible consequence if the hazard occurs. Consult the Risk Management Guidelines for Charles Sturt Risk Management guideline.

Consequence →

Likelihood ↓

Risk Ratings Matrix					
Risk Matrix	1. Insignificant	2. Minor	3. Moderate	4. Major	5. Catastrophic
5. Almost Certain	Medium	High	High	Very High	Very High
4. Likely	Medium	Medium	High	High	Very High
3. Possible	Low	Medium	Medium	High	High
2. Unlikely	Low	Low	Medium	Medium	High
1. Rare	Low	Low	Low	Low	Medium

Control Type

List all appropriate controls that should be implemented for this hazard.

Hierarchy of control		
Level	**Control**	**Abbreviation**
1	**Elimination**- e.g eliminate the chemical or hazard by use of alternative means.	ELI
2	**Substitution**- e.g. substitute with a safe chemical.	SUB
3	**Isolation**- isolate or separate the person from the hazard.	ISO
4	**Engineering**- engineering solution e.g. fume cabinet.	ENG
5	**Administration**- use of procedure, safe working procedures and / or training.	ADM
6	**PPE** - use of personal protective equipment.	PPE

Consultation and Authorisation

The risk assessment is not authorised until it has been approved as per the Risk Assessment procedure. No work should be commenced until the risk assessment has been approved.

The risk assessment form should be signed by the assessor (the person completing the risk assessment form). Approvals required are dependent of the type of activity, please refer to the approval flow chart in appendix 2. Hazardous chemical risk assessments may be approved by the Area Technical manager for low/medium risks as per the Risk Assessment Procedure.

Step 9: Approvals and acknowledgments

As per approval flow chart in Appendix 2

Assessor		**Signature**		**Date**	Click here to enter a date.
Supervisor (Research) **Subject Coordinator/Convenor (Teaching)**		**Signature**		**Date**	Click here to enter a date.
Technical Manager		**Signature**		**Date**	Click here to enter a date.
Associate Head of School, Research (or delegate)		**Signature**		**Date**	Click here to enter a date.
Director, Research Institute (or delegate)		**Signature**		**Date**	Click here to enter a date.

If a risk assessment has been prepared and additional persons will be added to a project or activity, this section should be used to provide acknowledgement that the risk controls will be implemented.

I have read, understood and will follow this risk assessment.		
Name	**Signature**	**Date**
		Click here to enter a date.
		Click here to enter a date.
		Click here to enter a date.
		Click here to enter a date.

Now that your risk assessment is complete, please ensure the risk assessment is distributed as per the risk assessment procedure and that the risk controls are appropriately implemented and reviewed. See Risk Assessment Procedure Summary.

For all risk assessments with a **high-risk rating**, please send to the Technical Support unit for archiving in UniRecords as per university requirements.

Risk Assessment Procedure Summary

Complete the Generic FoSH WHS risk assessment form

Identify task/s

Include sufficient level of detail so risks can be assessed, managed, and approved.

Identify Hazards

A hazard is defined as something that has potential to harm the health, safety and welfare of people at CSU, or damage property, equipment or the environment

Complete Specialised Risk Assessment form/s

If risk assessment identifies special hazards, **additional risk assessments** should be completed accordingly (see list below)

- *Hazardous substances*
- *Microorganisms*

Identify and assess the risks

- Determine the consequences.
- Determine the likelihood.
- Use risk matrix to determine risk rating
- Identify control measures to manage risk.

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- Determine the likelihood.
- Use risk matrix to determine risk rating
- Identify control measures to manage risk.
- Attach relevant documentation (e.g SDS)

Submit for approval

- Risk assessment should be approved by appropriate authority (Table 4 of Risk assessment procedure)

RA Not Approved

Re-assess risks.

- If risk is not deemed appropriate additional control measures may be required
- RA should be amended and resubmitted.

RA Approved

Implement control measures.

- Follow control measures identified in risk assessment as per (Table 5 of Risk assessment procedure)

Measure and evaluate risk.

- Facility manager to maintain risk register.
- Monitoring carried out to ensure effective risk controls (e.g inspections, observation by managers or technical services or audits).

WHS Documentation and record keeping.

- Printed RAs to be kept in the work area.
- For further details see risk assessment procedure.
- High risk RAs to be archived in UniRecords.