

DEPARTMENT OF CHEMICAL & BIOLOGICAL ENGINEERING

PURCHASING OF CHEMICALS and BIOLOGICALS PROCEDURE

Authorisation


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Introduction

To ensure that all Chemicals brought into the Department of Chemical and Biological Engineering C&BE controlled laboratories comply with current Governmental policies and legislation and Department rules, the following procedure is to be applied to all Chemicals, whether they are purchased from a vendor or brought in from an area external to the Department.

Access to Coupa

Before providing a User to have access to Coupa for purchasing chemicals and Biological materials, please ensure the Approver have received the following document and training courses have been completed

- The Declaration on page 5 must be signed and submitted to Academic Supervisor for approval to ensure the Users understand this purchasing procedure.
- Complete “ Chemwatch SDS and Chemical Register application” and “Dangerous Goods and hazardous Substances Basic Principles “ online training on myDevelopment

Introducing a Chemical into the Department of Chemical and Biological Engineering

1. ALL purchased Chemicals*, without exception, must be purchased through a purchase request in Coupa
2. RA must be completed before purchasing a chemicals according to (Monash OHS “USING CHEMICALS PROCEDURE”),
3. Any Chemical being transferred to CBE our department ownership from another Faculty/Department within Monash University must have been initially purchased through P2P and/or be on the donor areas Chemical register. See the heading Controlled Chemicals for information regarding Controlled Chemicals
4. If a Chemical is received as a (free) sample from an external organisation then the Department Safety Officers must be consulted prior to it being entered into Chemwatch and used.
5. To purchase any chemical, the following documentation is required to be uploaded on COUPA for approval
 - a. Australian Chemical SDS
 - b. The SDS for each chemical must be from the manufacturer, supplier or importer of the chemical, and present in Chemwatch database
 - c. Authorised Purchase Request (By Fund Holder/ Academics supervisor)
 - d. Completed and signed Chemical Purchase Checklist or Biological checklist
 - e. RA of the chemical(s)
6. Upon receipt into the receiving laboratory, inventory on Chemwatch must be updated
7. SWI/RA must be completed prior to use.

Introducing a biological product into the Department of Chemical Engineering

1. ALL purchased biological products, without exception, must be purchased through a purchase request in Coupa
2. For imported products, Monash’s Research Compliance Team should be contacted for general advice and if a DAWR import permit will be needed quarantine@monash.edu

3. SWI/RA must be completed prior to use.

*Specifically excluded in the definitions of “chemicals’ are:

- Genes and plasmids composed of DNA
- Molecular biology kits such as Nucleic acid and protein purification kits; yeast transformation kit; plasmid purification kit
- Precast polyacrylamide gels for protein analysis

(This is on the basis that an SDS is not available for these and they are considered consumables or biologicals)

SDS (includes MSDS)

1. A current **AUSTRALIAN SDS** is required for ALL Chemicals prior to being brought into CBE laboratories
2. The **SDS** must be in the Chemwatch database.
 - a. If it is not, send a copy to the Chemwatch Administrator within the University OHS Department, who will arrange for it to be uploaded. Until then a hardcopy of the **SDS** is to be readily available
3. The **SDS** is to be checked to ascertain whether the Chemical is:
 - a. A Scheduled Poison and what category
 - b. A Scheduled Carcinogen and what category
 - c. A Chemical of High Risk Security Concern
 - d. A Chemical of Security Concern
 - e. Category 1 Illicit Drug Precursor
 - f. Safeguards Materials: contain uranium, thorium or plutonium in any form
4. If a current **AUSTRALIAN SDS** is not available for your chemical, then an **SDS** will need to be prepared. Information regarding the preparation of an **SDS** can be found [here](#). The key criteria for a custom prepared **SDS** include:
 - a. A local contact point (which could be the preparer of the **SDS** itself) on the front page
 - b. The same information as expected in a current **AUSTRALIAN SDS**
 - c. The custom prepared **SDS** may be a supplemented or augmented foreign **SDS**: if the foreign SDS is complete and reputable, and has the contact details of the foreign supplier. Such a foreign SDS will need to have a local (Monash) point of contact, and also be prepared in accordance with the following points borne in mind:

When purchasing a chemical from overseas you effectively become the importer of the material. You will therefore need to add yourself (or if relevant, Monash University) as an Australian Supplier and include Emergency contact information from Monash University. Under Australian requirements, the SDS must also have 16 sections, which some SDS's from overseas do not often have. Additionally, any materials that are brought into the country must appear on the "The Australian Inventory of Chemical Substances (AICS)" database that shows the chemicals have been assessed as being safe to import into Australia.

If the NICNAS database does not have the chemicals you are seeking to import as listed, you will have to make a request for them to assess these chemicals prior to importing them. This should be the case for all new chemicals. The link that can be used to check the AICS database and has all the information relating to the NICNAS requirements is at: <https://www.nicnas.gov.au/search>

With respect to a custom SDS, you can request that Chemwatch write an SDS for you as per Australian requirements. This service begins from ~AUD\$60 per SDS.

Obviously, the use of any chemicals (foreign or otherwise) will need to be covered in the relevant RA/SWI, which could be completed prior to chemical ordering in order to assess feasibility.

Scheduled Poisons

1. If a chemical is identified as being a Scheduled Poison, only the following Schedules can be purchased: S5 & S6 (No permit required)
S4 excluding drugs of dependence (Covered by C&BE Poisons Permit)
S7 Limited to benzene, arsenic and cyanides (metallic) (Covered by C&BE Poisons Permit)
2. Scheduled Poisons that are covered by the C&BE permit can only be ordered through a Responsible Person (RP) named on the Permit (Current RP are listed in the [Useful Information](#) section at the end of this document)
3. Scheduled Poisons are to be controlled in accordance with the current [Poison Control Plan](#)
4. If a Scheduled Poison is to be transferred to a department Laboratory from an area outside of CBE, the RP must be informed before the transfer can take place.

Scheduled Carcinogens

1. Scheduled Carcinogens can only be purchased if a License is held by the Academic who wishes to make the purchase. Details regarding the License and the application form can be found [here](#)
2. When purchasing a Scheduled Carcinogen a copy of the License must be included with the purchasing documentation detailed under the heading "[Introducing a Chemical into CE](#)"
3. Scheduled Carcinogens cannot be transferred between Faculties / Departments, Academics and/or Laboratories.

Note: The Following Category of Chemicals are controlled by a Code of Practice rather than Legislation. However as stated on the [Australian Government Chemical Security](#) Website. "If you work with Chemicals you have an important role to play in keeping Australia Safe". Although not mandatory, it is highly recommended that some, if not all, of the following recommendations are followed.

Chemicals of (High Risk) Security Concern (CSC)

1. Access to CSC should be limited
2. CSC Should be kept in a locked container
3. Monitor Usage of CSC
4. Carry out regular stock checks
5. Any suspicion of, unusual activity, excessive usage, or unaccountability is to be reported immediately to Department Safety Officers

Note: Further information can be found on the [Australian National Security Website](#)

Category 1 Illicit Drug Precursors (CAT 1 IDP)

1. Prior to receiving a Cat1 IDP chemical, the requesting Academic should receive an "End User Declaration" (EUD). [EUD Example](#). This needs to be signed and sent back as instructed on the document. A copy of the EUD is to be kept with the Chemical and a copy filed with the Department Safety Officers. If a Cat 1 IDP is received without an EUD being requested and submitted, Departmental Safety Officers need to be informed immediately so follow up action can be undertaken
2. Should have limited access
3. Should be kept in a locked container
4. Monitor Usage
5. Carry out regular stock checks
6. Any suspicion of; unusual activity, excessive usage, or unaccountability is to be reported immediately to Department Safety Officers
7. Cat 1 IDP Chemicals cannot be transferred between Academics or Projects. The use of the chemical is restricted to the usage stated in Sections 4 & 5 of the EUD.

Safeguard Material

If the substance contains uranium, thorium or plutonium in any form, OH&S must be consulted to determine if the substance and the location of use are listed on the University's Safeguards permit.

Banned Chemicals

The following Chemicals are banned for use within ALL Chemical Engineering laboratories.

- Perchloric Acid
- Nitric Acid / Ethanol mixes

Chemicals Requiring Head of Department Approval

The following Chemicals require the approval of the Head of Department before being used by an individual within all Chemical Engineering laboratories

- ALL Etchants
- Nitric Acid / Organic Mixtures
- Hydrofluoric (HF) Acid

Declaration

I hereby declare that I have read and understood this procedure document and agree to fully comply with its content. It is my responsibility to comply with the Department of Chemical and Biological Engineering Chemical policy (including the approved ordering, safe handling, storage, use and disposal of chemicals) and failure to do so will lead to disciplinary action.

Signed.....

Printed Name

Appendix

Useful Information

Scheduled Poisons Permit “Responsible Persons” (RP)

- Ms Kim Phu (kim.phu@monash.edu) Building 37/RMG03B Ext 53433

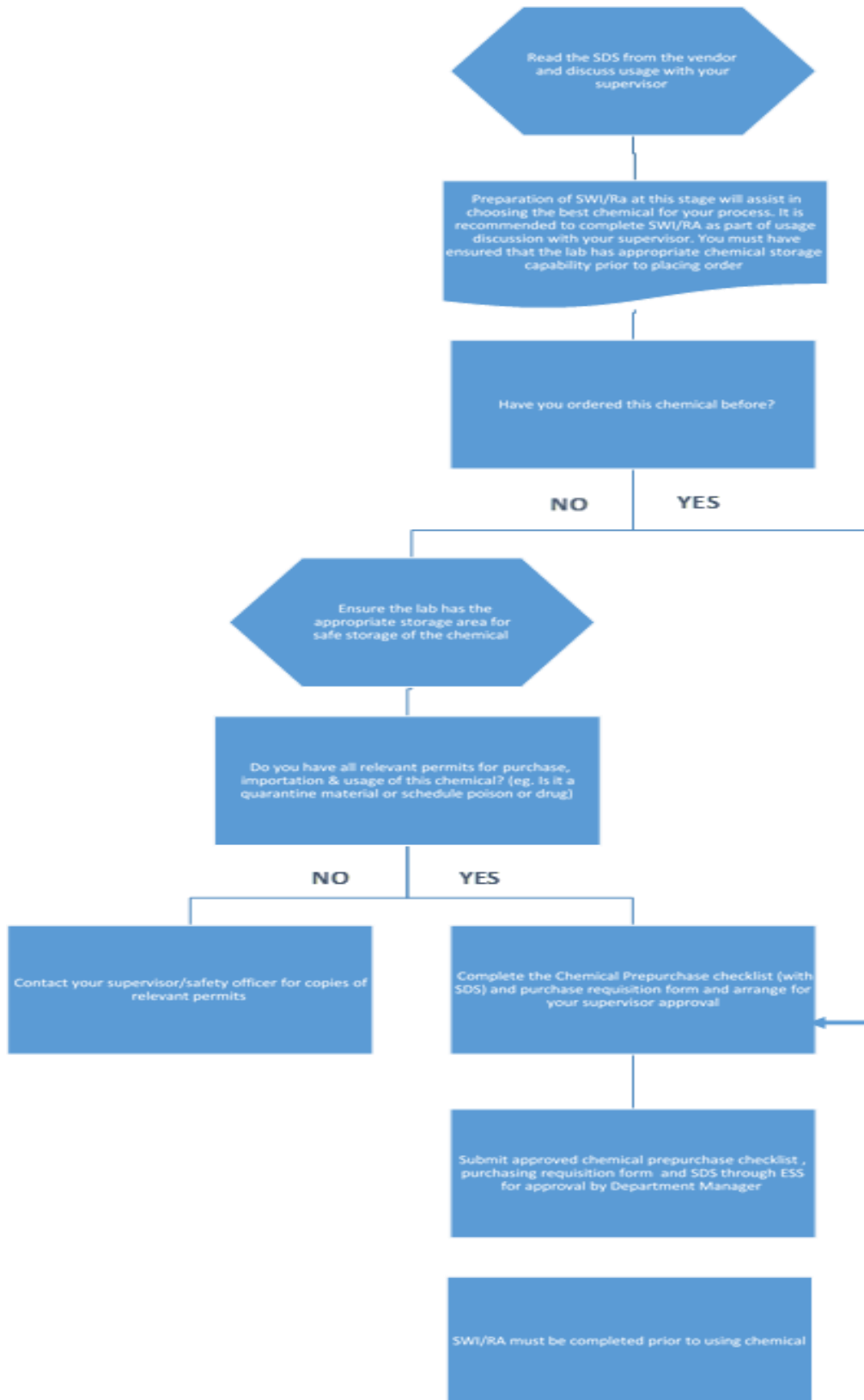
Websites

- [Chemwatch](#)
- [Current Poisons Standard \(SUSMP\) Scheduled Carcinogen](#) - <http://www.worksafe.vic.gov.au/safety-and-prevention/health-and-safety-topics/hazardous-substances/about-the-problem/scheduled-carcinogens>
- [Scheduled Carcinogen Licence Information](#) <http://www.worksafe.vic.gov.au/safety-and-prevention/licensing/worksafe-licence-types-and-fees/licence-to-use-a-scheduled-carcinogen#two>
- [Australian Government National Security Website](#) <https://www.nationalsecurity.gov.au/ChemicalSecurity/Pages/default.aspx>

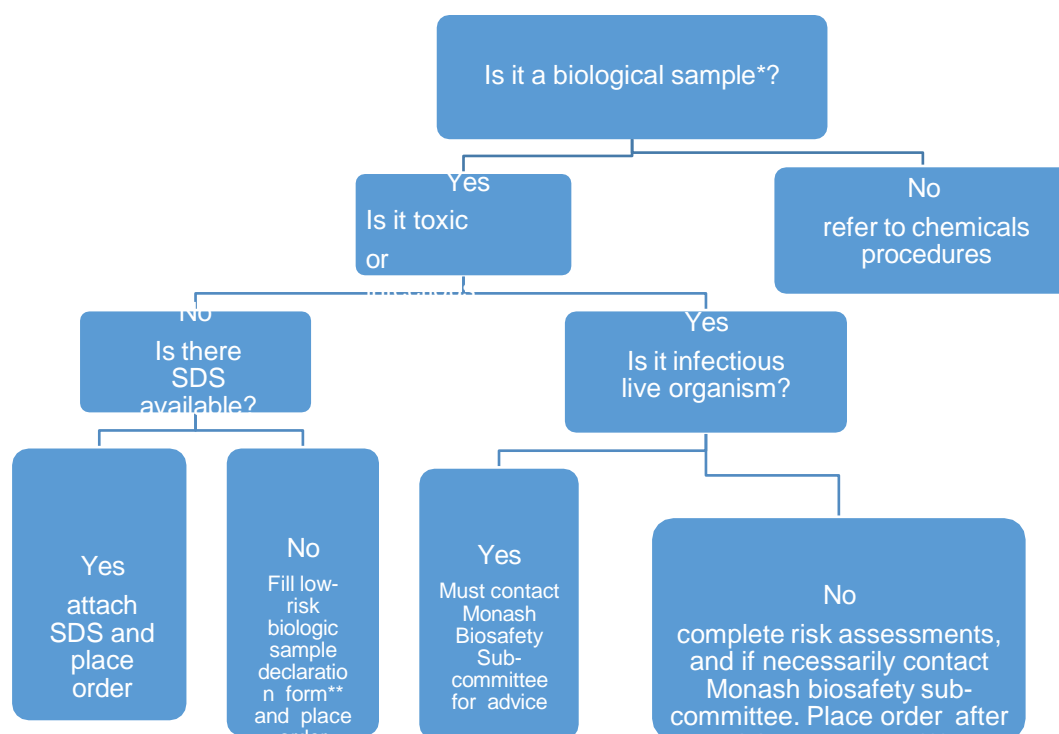
Documents

- [Chemical Purchase Checklist](https://www.monash.edu/_data/assets/pdf_file/0020/113726/Chemical-prepurchase-checklist.pdf) https://www.monash.edu/_data/assets/pdf_file/0020/113726/Chemical-prepurchase-checklist.pdf
- [Category 1 Precursor Chemicals –](#) (<https://drive.google.com/open?id=0Bwm9z6vlcvYeN3VNdVN5VXFrams>)
- [Chemicals of \(High Risk\) Security Concern –](#) (<https://drive.google.com/open?id=0Bwm9z6vlcvYed2dmZDFwS1cwZnc>)
- [Poisons Control Plan](#) - (<https://drive.google.com/open?id=0Bwm9z6vlcvYeanZWekxNSmtvQWs>)
- [Low-risk biological sample declaration](#) <https://docs.google.com/forms/d/e/1FAIpQLScE1gFpZz8ox7nYxVgHBm5QojhTcARfkahy5P6PQcPGOqXQuw/viewform>
- [Monash University Purchase and Storage of Scheduled Poisons –](#) (<https://drive.google.com/open?id=0Bwm9z6vlcvYeazVKUTHJOFR5U2c>)
- [PURCHASE AND STORAGE OF SCHEDULED POISONS](#)
- [Safety Data Sheet information](#) - <https://drive.google.com/a/monash.edu/file/d/0Bwm9z6vlcvYeeHNyMmRPcXd3V0E>
- [Preparation of Safety Data Sheets for Hazardous Chemicals](#) - <https://drive.google.com/file/d/0Bwm9z6vlcvYeZ1NILTVpRWF4eDg/vie>
- [Purchasing of OHS Prescribed Commodities In Coupa Procedure](#)

Flow chart for purchase of chemicals



Flow chart for purchase of biological samples



Preparation of SWI/RA at this stage will assist in choosing the best biological sample for your process. It is recommended to complete SWI/RA as part of usage discussion with your supervisor. You must have ensured that the lab has appropriate chemical storage capability prior to placing order.

* Biological samples may include proteins, DNA/RNA, peptides, microorganism, and virus. See definition below

** A template can be prepared for this purpose.

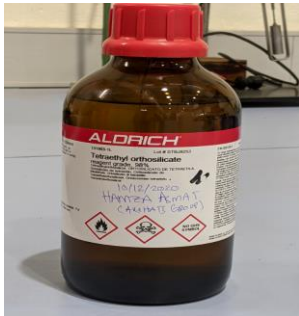
*** This may use the chemicals procedure.

Monash biologic definition from “*using Biologicals and Animals Procedure*”:

“For the purpose of this document, the definition of a biological will include, but not be limited to blood, blood products, tissue, body fluids (e.g. urine, faeces, semen, vaginal secretions, pericardial fluid, cerebrospinal fluid, synovial fluid, pleural fluid, amniotic fluid, saliva, mucus, any fluid with visible blood) and any derivatives produced by chemical or physical means (e.g. protein, enzyme or blood fractions). In addition, it is intended to cover micro-organisms (bacteria, **VIRUSES**, Using Biologicals and Animals Procedure, v4.1 Responsible Officer: Manager, OH&S Page 4 of 24 Date Effective: November 2015 Date of next review: November 2018 for the **latest** version of this document please go to: <http://www.monash.edu.au/ohs/> parasites, fungi, prions) wild type or mutant and plants and plant material. It is not intended to include live animals in this definition.”

Chemical Delivery

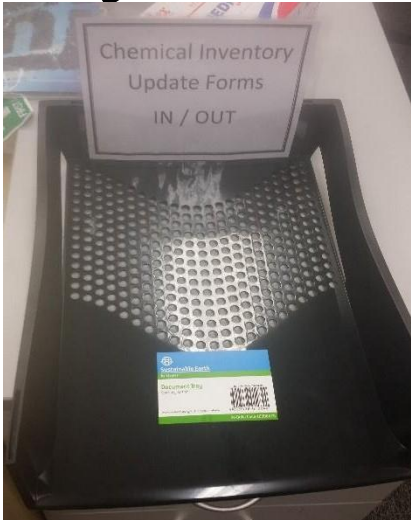
Once delivered the Engineering store will send an email to confirm arrival of the chemical and availability for pickup. After transport to the laboratory ensure the chemical is appropriately stored, as outlined in the relevant risk assessment.

<p>Mark the name of user and date of arrival directly on the chemical packaging.</p>	
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Every laboratory Users are required to complete the two (2) online trainings on myDevelopment as per [Training Needs Analysis Checklist](#) to update the chemical inventory themselves

- Dangerous Goods & Hazardous Substances Basic Principles
- Chemwatch SDS and Chemical Register application

In case the Lab Users have not completed the training, ensure a Chemical Inventory Update form (sample below) is filled out and placed along with a printed copy of the supplier's SDS it in the laboratories in/out tray.

<p style="text-align: center;">Chemical Inventory Update</p> <p style="text-align: center; font-size: 1.2em;">IN / OUT</p> <p style="text-align: center;">(please circle)</p> <p>Date: _____</p> <p>User: _____</p> <p>Chemical Name: _____</p> <p>_____</p> <p>Manufacturer: _____</p> <p>Quantity (volume/weight): _____</p> <p><small>*Submit with copy of vendor SDS*</small></p>	+	<p style="text-align: center;">Vendor Safety Data Sheet</p> <p style="text-align: center;">~~~~~</p> <p style="text-align: center;">~~~~~</p> <p style="text-align: center;">~~~~~</p>	
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This form will be used by the lab manager to update the chemical inventory for the laboratory on Chemwatch.

The vendor SDS if not already in Chemwatch will be sent to OH&S (Alex.zuberman@monash.edu) for uploading to the system.

Document history

Version	Date Approved	Changes made to document
1		Original Version
2	December 2018	Endorsed by HoD
3	September 2022	<ol style="list-style-type: none"> 1. Update name of the department 2. RA must be completed and uploaded on Coupa when place the order according to Monsh OHS procedure 3. Criteria requirement before approve for Users to have access to Coupa for purchasing 4. Add the requirement of SDS must be from the the manufacturer, supplier or importer of the chemical, and present in Chemwatch database before placing the order on Coupa 5. Changed ESS to Coupa 6. Added footer as per Monash OHS guideline Document Control & Retention Procedure 7. Added document history 8. Added safeguard material
4	May 2024	<ol style="list-style-type: none"> 9. Update the link to the department of Health and ages care website 10. Update the email address of Monash's OHS Consultant related to Chemwatch 11. Update the procedure chemical delivery and receiving chemicals 12. Correct the page number of the Declaration signature