

Projects Involving Carcinogenic or Highly Toxic Substances

Supplement to the University of Sydney Research Proposal Clearance Form

Please complete each section by ticking boxes and adding notes in the space provided as appropriate. Attach the completed form to the Research Proposal Clearance Form (RPCF) and submit to the Research Office. Completion of this form assists researchers to assess and control the risks associated with research. This is a requirement of the Granting bodies and the University's ohsrm Program ¹. It is also a prerequisite for the release of research funding.

Project title (exactly as it appears on RPCF):

Location of project (building and room number):

Chief Investigator (name and contact number):

Substance name:

Note: A permit from NSW WorkCover is required to use some carcinogens (refer to the attached list).
WorkCover requires 60 days notice of the proposed project commencement.

- Substance is carcinogenic or highly toxic, but not Notifiable or Prohibited
- Notifiable substance
- Prohibited substance #
- WorkCover has been notified of the intended carcinogen use via the prescribed form ²
- WorkCover has issued an authorisation for the work

RISK ASSESSMENT

- A material safety data sheet for the substance is held ³. This has been referenced in the project planning.

The hazard – the substance is carcinogenic.

Route(s) of exposure:

List:

Inhalation

Target organs affected:

Ingestion

Types of cancer caused:

Skin absorption

Acute effects:

Substance form - liquid, powder etc.

Maximum volume held:

Concentration in use:

Volume in use:

Typical processes eg. weighing out,
decanting, pipetting etc.

Method of deactivating substance:

Hazardous waste generated:

Liquid

Solid

Gaseous/airborne

Description:

Work Environment

Please describe the suitability of the environment for the proposed work, including any shortcomings.

Space provided:

Bench & floor surfaces:

Traffic:

Temperature & ventilation:

Lighting:

Housekeeping:

Security of facility:

Individuals involved

Consider each project team member (where they are known) and their capacity to do the work safely and effectively.

Name	Role in team eg research assistant	Experience & training	Characteristics that increase risk

Physical activities

Describe activity

- Repetitive actions or long duration of task _____
- Physical exertion _____
- Bending, reaching or twisting _____
- Sustained or uncomfortable posture(s) _____

RISK CONTROLS

The following list mirrors the hierarchy of hazard control. Tick relevant risk controls that will apply and provide brief details where relevant eg, for restricted access, details may be "door locked when unattended"..

Details:

- Elimination The benefit to be derived outweighs the risk from using the substance _____
- Substitution A less toxic substance is not available as an alternative _____
- Isolation
 - Secure facility with only authorized access _____
 - Designated work area within facility _____
 - Designated and secure storage for the substance _____
 - Spill tray and/or absorbent bench coat for bench work _____
 - Containers capped _____
 - Secondary containment for any transport outside facility _____
- Minimisation
 - Smallest possible volumes _____
 - Dilution to lowest possible concentration _____
 - Shortest duration of task/exposure _____
- Engineering
 - Automated processes _____
 - Fume cupboard or fume/dust extraction system _____
 - Proper maintenance of equipment _____
- Administration
 - Restricted access _____
 - List of authorized personnel _____
 - Hazardous substances training for project personnel _____
 - Local induction training and orientation _____
 - Records kept of project team training _____
 - Hazard signposting at entry to facility (Uni standard) _____
 - Proper labeling of containers, including decanted _____
 - Ready access to MSDS _____

NOTIFIABLE SUBSTANCES

Acrylonitrile [107-13-1]
Benzene [71-43-2]-when used as a feedstock containing more than 50% of benzene by volume
Cyclophosphamide [50-18-0] (cytotoxic drug)-when used in preparations for therapeutic use in hospitals and oncological treatment facilities, and in manufacturing operations
3,3 -Dichlorobenzidine [91-94-1] and its salts (including 3,3 -Dichlorobenzidine dihydrochloride [612-83-9])
Diethyl sulfate [64-67-5]
Dimethyl sulfate [77-78-1]
Ethylene dibromide [106-93-4]-when used as a fumigant
4,4 -Methylene bis(2-chloroaniline) [101-14-4]-MOCA
2-Propiolactone [57-57-8]
o-Toluidine [95-53-4] and o-Toluidine hydrochloride [636-21-5]
Vinyl chloride monomer [75-01-4]

PROHIBITED SUBSTANCES

These substances can be used for research and analytical purposes.

2-Acetylaminofluorene [53-96-3]
Aflatoxins-except in foods where specifically permitted under the Food Act 1989
4-Aminodiphenyl [92-67-1]
Amosite [12172-73-5] (brown asbestos)-except for removal, disposal, maintenance, encapsulation and enclosure purposes and situations where amosite occurs naturally and is not used for any new application
Benzidine [92-87-5] and its salts (including benzidine dihydrochloride [531-85-1])
bis(Chloromethyl) ether [542-88-1]
Chloromethyl methyl ether [107-30-2] (technical grade which contains bis(chloromethyl) ether)
Chrysotile [12001-29-5] (white asbestos)-except when:
 (a) used for the purpose of research or analysis, or
 (b) being removed or disposed of, or being handled for storage or stored awaiting disposal, or
 (c) encountered during non-asbestos mining, or
 (d) comprising or included in an item being used for the purpose of a historical or educational display.
Crocidolite [12001-28-4] (blue asbestos)-except for removal, disposal, maintenance, encapsulation and enclosure purposes and situations where crocidolite occurs naturally and is not used for any new application
4-Dimethylaminoazobenzene [60-11-7]
2-Naphthylamine [91-59-8] and its salts
4-Nitrodiphenyl [92-93-3]

REFERENCES

1. ohsrm Program – the University’s occupational health and safety risk management system, documents are available on-line from: http://www.usyd.edu.au/risk/ohs_manual/ohsrm.shtml
 2. WorkCover Notification Form for Work Involving the use of Carcinogenic Substances
http://www.workcover.nsw.gov.au/NR/rdonlyres/E5F8722E-2C12-469A-B5EE-5D667E873604/0/gen_carcinog_subs_notif_4074.pdf
 3. Chem Alert II hazardous substance database
 4. Guidelines for Working with Hazardous Substances
 5. Hazardous Waste Disposal Guidelines
- 3, 4 & 5 are available on-line from http://www.usyd.edu.au/risk/ohs_manual/haz-subst/index.shtml