

Hazard Identification

(Note 4)

Name of Substance(s)	Risk Phrases	Route	Hazard Ratings		
			Low	Medium	High
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Physical (Heat electricity, UV etc)	Not applicable				

Routes by which exposure can occur. (X in relevent boxes)

Contact, skin	Absorption through skin	Contact, eyes	Inhalation	Ingestion	Injection, sharps

Grounds for concluding exposure is not a risk to health.

Quantities or rate of use of substance(s) are too small to constitute any risk to health under foreseeable circumstances of use, even if control measures broke down. *If there are reasonable grounds for reaching the conclusion that risks are insignificant, finish this assessment now by signing on page 1.*

Potential Effect of Exposure.

What could be the effect of exposure to the above hazardous substance?

Single acute exposure	Serious		Not Serious		Not Known	
Repeated low exposure	Serious		Not Serious		Not Known	
Adverse effect could be	Long term		Short term		Not Known	
Effects could be hazardous to human reproductive system	Yes		No		Not Known	

Description of Working Practice

(Note 5)

Instruction for work activity

The work activity consists of well-documented routine procedures carried out frequently in a controlled environment and requiring only simple and easily understandable verbal instructions.

Scheme of Work (Continue on a separate sheet if necessary) *Identify the stages in the procedure (s) where the risks are either medium or high, and describe the precautions to be taken to reduce this level of risk.*

(Note 6)

Training for work activity

(Note 7)

Specific training will be required

Specify

Supervision

(Note 8)

The supervisor will approve straightforward routine work in progress	
The supervisor will specifically approve the scheme of work	
The supervisor will provide supervision personally to control the work	

Engineering Control Measures

If parts of the work cannot be carried out on the open bench, please specify where this work will be carried out, e.g. in a fume cupboard or in a specialised containment room.

<i>Specify</i>

If there is a requirement for personal protective equipment, what is required and when is this to be worn:

What	X	When
Gloves		
Respiratory protective equipment		
Safety glasses		
Visor		
Other		
None		

Monitoring

(Note 9)

Monitoring for airbourne contaminants will be required	
Biological monitoring of workers will be required	
<i>Specify</i>	

Contingency Planning

(Note 10)

Written emergency instructions will be provided for workers and others who may be affected.

Provision of the following may be required for emergency:

Spill neutralisation chemicals	
<i>Specify</i>	

Eye irrigation point Body shower Other first aid provision

Breathing apparatus (with trained operator) External emergency services

Poison antidote

Specify

Do the precautions above adequately control the risks of handling the substances specified in the manner intended? If not please specify the additional precautions required.

Specify

Disposal of waste chemicals will be by one of the following methods (consult the University Chemical Safety Advisor if in doubt).

Flushing small quantities down the drain with excess water	
Collection of larger quantities of waste solvents in labelled drums*	
Collection of waste oils in labelled drums*	
Notify the University Chemical Safety Advisor for onward transmission to a licenced company*	
Collection of radioactivewaste in specified containers for storage and removal by the University Radiation Protection Service*	
To specific laboratory waste collection, after rendering safe	

Mark X in appropriate boxes. *There may be a cost involved for this service.

Specify any other disposal method _____

What legal permissions have been obtained? (List and attach a copy of the forms)

Implications for other persons

The following people may need to have a copy of this risk assessment, and sign the declaration:

Academic staff

Technical staff

Estates maintenance personnel

Visiting staff

Postgraduates

Secretarial staff

Undergraduates

Cleaners

Contractors

<u>Notes on Completing the Risk Assessment Forms</u>
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Note 1 - Choose a title or give a serial number to facilitate departmental filing and retrieval of risk assessments.

Note 2 - These forms must be completed **before** any work with substances hazardous to health is begun, so that a *suitable and sufficient* assessment of the health risks is made. This assessment should be reviewed immediately if there is any reason to suppose that the original assessment is no longer valid due to significant changes in the work activity.

Note 3 - A copy of this assessment must be given to each staff member postgraduate research student or to each 3rd or 4th year undergraduate performing the work, and he/she must sign as receipt. When this assessment is reviewed, add below the signature of the reviewer, the date and whether the assessment was changed. Any signatories still covered by a modified assessment must then sign again to show that they are aware of the change.

Note 4 - The COSHH regulations do not apply where either the Control of Asbestos at Work Regulations or the Control of Lead at Work Regulations apply, or where the risk to health is solely from radiation, noise or pressure or similar physical hazards, nor to medicines administered as part of a controlled medical trial. Similarly the Dangerous Substances and Explosive Atmospheres Regulations cover the fire issues inherent in the use of many laboratory solvents. However, it is recommended that this risk assessment should cover both COSHH and DSEAR.

A substance should be regarded as hazardous to health if it is hazardous in the form in which it occurs in the work activity, including by-products and waste residues. The regulations specify these criteria for such a decision. (A) *substance hazardous to health means a substance:-*

- Which is listed in Part 1 of the approved supply list of the CHIP regulations⁸
- For which the Health and Safety Commission has approved an exposure limit (*OES, MEL, or WEL*)
- Which is a biological agent (*See Form RA2*)
- Which is dust of any kind ... when present in air a concentration in air equal or greater than $10\text{mg}/\text{m}^3$ TWA of inhalable dust or $4\text{mg}/\text{m}^3$ of respirable dust.
- Which ... because of its chemical or toxicological properties and the way it is used or is present at the workplace creates a risk to health.

For the Hazard Identification section:-

A - Name the substance or group of substances to be used in the activity and list in the columns below together with their particular exposure limit. Verify that no safer alternative could be used.

B - Classify each of the substances according to the most significant of the following categories; very toxic [VT]; toxic [T]; corrosive [CO]; irritant [IR]; harmful [H]; carcinogen/mutagen/teratogens [CMT].

C - Decide whether or not the substances as used in the procedure present a Low, Medium or High risk to the user.

Note 5 - Where an assessment of risk is simple and obvious and where the work activity is straightforward and clear verbal instructions can be easily given, a written scheme of work is unnecessary.

Note 6 - The scheme of work is a statement of how the work activity is going to be carried out safely. It should specify the ways in which the hazardous substances are to be used or handled, and should give sufficient details to identify the precautions necessary to control the risks that arise from working with the hazardous substances.

Note 7 - Any specific training required to ensure that persons involved in the work activity can operate safely should be described here. This is particularly important so that persons can understand and comply effectively with the scheme of work, where this has been formulated.

⁸ The Chemical (Hazard Information and Packaging for Supply) Regulations 2002, SI 2002 No 1689

Note 8 - The level of supervision must always be appropriate to the competence of the individuals involved in the work activity.

Note 9 - For the majority of work, atmospheric monitoring should not be necessary for protecting health, providing sufficient thought has gone into ensuring the adequacy of control measures in relation to risks, and the control measures are properly used and maintained. For further information on monitoring and health surveillance see the Approved Code of Practice under the Regs, paragraphs 186-238.

Note 10 - Contingency planning is required to limit the extent of the risk arising from an uncontrolled release of a hazardous substance and for regaining control as quickly as possible.