



Chemical Agent & CMR Risk Assessment Form¹

Department assessment no.	Issue Date:
Title of work/project:	
Location (Lab where activity will be carried out):	Review Date:
Assessment carried out by:	

1. Table(1) of chemicals used in process to be assessed and relevant safety information²

<i>Substance name</i>	<i>CAS no</i>	<i>Concentration³</i>	<i>Amount used</i>	<i>Hazard Classification (Section 2 of SDS)</i>	<i>Hazard statement/Risk phrase</i>	<i>Route of exposure</i>	<i>Frequency of use⁴</i>	<i>Duration of exposure Minutes, hours</i>	<i>OELV⁵</i>

¹ = As required by the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001)

² = Waste and products of reaction must also be listed.

³ = Conc = concentration (%N ,M, ppm etc))

Frequency of Use	Indicative Criteria
Occasional	Use averaging less than 2 hours per week over an extended period or use on a small number of occasions (less than 10) after which use will cease
Frequent	Regular daily use for 1-2 hours per day or less or Regular use for several hours on one or two working days per week
Continuous	Use for several hours per day on all or a majority of working days

⁵ OELV = occupational exposure limit value as set down in the most up to date Code of Practice for the Chemical Agents Regulations.2001 If unavailable use tlv or equivalent

2. Evaluation of potential exposure to (Category 1A or 1B)(CLP) or (Class 1,2)(CPL) Carcinogens, Mutagens and Reproductive (CMRs)Toxins

If any chemical listed in Table 1 are classified as above and are subject to restrictions of the Carcinogen Regulations (2001) have alternatives been considered. Please give details below and justify why Category (1A and 1B)(CLP) (Class 1or 2)(CPL) will be used.

If a CMR is used, is the exposure below the OELV and are users informed of the hazard and risks associated with such a chemical

Is occupational monitoring required to ensure that the control of exposure to the hazardous substance(s) is adequate?	Yes	No
Is health surveillance required?		
Have you recorded the use of CMR and exposures of individuals to CMRs in the CMR Log Book.		

3. Circumstances of work involving the chemical agents

Please specify^{6,7}

4. Storage and Transport

Please specify

5. Disposal of Waste.

Please specify

⁶ Please specify the page number and undergraduate laboratory manual edition as appropriate or relevant SOP

⁷ If not an undergraduate practical the relevant SOP or procedure must be attached

6. Personnel exposed

7. Persons directly or indirectly involved in the work activity who may be exposed⁸

Identify any persons in the following groups, directly or indirectly involved with the work activity, that may be at risk from the hazards of the activity.

Academic staff		Undergraduate students		Maintenance staff		Administration Staff	
Technical staff		Laboratory attendants		Emergency personnel		Contractors (incl. catering)	
Postgraduate students		Cleaning staff		Visitors			

8. Preventative or control measures currently in place in addition to those outlined in the manual/SOP e.g. safety instruction given at start of practical, restrictions on who can carry out task etc.

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Should any extra training be given to carry out the task(s) safely. If yes please specify below	Yes	No
Specific training Requirement		

9. Engineering Control Measures

The work can be carried out safely on the open bench		
The work must be carried out in a fume cupboard(s)		
Where engineering controls are used e.g. fume cupboards, LEV, etc. are these subject to a formal performance test, at least every 12 months, and records kept? <i>If no, this must be arranged.</i>	Yes	No
Is air monitoring required to ensure that the control of exposure to the hazardous substance(s) is adequate?		

⁸ Persons identified above may require to be informed of the information contained in this risk assessment.

10. Personal Protective Equipment (PPE)

If adequate control of exposure to the hazardous substance(s) cannot be achieved by substitution or engineering controls the following type(s) of PPE will be required (in addition to the standard laboratory coat and glasses) for part or all of the activity.

Hand protection		Respiratory protection		Face protection		
Specify the grade(s) of PPE to be worn:						
Specify when during the activity the item(s) of PPE must be worn:						

11. Activity where there is a foreseeable potential for significant exposure

List any activities such as maintenance of equipment, spillage etc where there could be significant exposure⁹.

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12. Emergency Procedures^{10,11,12}

In the event of an emergency the procedures set out in the School Safety Statement, Code of Practice for First aid within the Chemical Laboratory and Code of Practice for Chemical Spills shall be followed unless otherwise specified. Please consider failure of services(Fume-hood, water, electricity etc)

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Are there special first aid measures required in the event of exposure to any of the above? Yes/No (If yes please outline below)¹³

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⁹ Spillage of small amounts may not lead to significant exposure. In general spills < 250ml or 500g would be considered small. However, the chemical/physical properties of the substance should be taken into account when assessing the potential risk of exposure.

¹⁰ Please refer to the School Safety Statement for general emergency procedures

¹¹ Please refer to the School Code of Practice for First Aid within the Chemical Laboratory

¹² Please refer to the School Code of Practice for Chemical Spills

¹³ Please give details of any measures required, not already outlined in the School Code of Practice for First Aid within the laboratory

13. Is anyone pregnant or belonging to a sensitive risk group (Pregnant, breastfeeding, or underlying Medical Condition (that could be exacerbated by exposure to chemicals)). **Yes/No**

If so has a 'person specific' risk assessment been undertaken **Yes/No**
This will appear as a 'precaution in all lab manuals.

14. Is Specific Health Surveillance Required? **Yes/No** (If yes please outline below) (CMRs and Sensitisers)

15. Risk Assessment

Risk assessment is based on the likelihood or probability of a person or persons being exposed to a chemical or chemicals, combined with an estimation of how harmful the outcome of the exposure would be to a person or persons.

<i>likelihood of exposure</i> <i>result of exposure</i>	Highly unlikely	Unlikely	Likely
Slightly harmful	Insignificant risk	Low risk	Medium risk
Harmful	Low risk	Medium risk	High risk
Extremely harmful	Medium risk	High risk	Unacceptably high risk

Taking into account the information you have gathered and the control measures or preventative measures that are currently in place, what is your estimation of the risk.

Risk Assessment with current control measures in place =

16. Risk Assessment Approval

If the risk assessment is completed in conjunction with a postgraduate or Project student the supervisor must review it and both must sign below.

Supervisor

Student (where project work or equivalent is undertaken)

Date ____/____/____

Date ____/____/____