



COSHH Risk Assessment Template guidance

Assessment Title	Name of the process being undertaken
Assessment Reference	Give your risk assessment a unique reference number to help identify it
School / Management Unit	The management unit where the work will be undertaken (e.g. School of Geosciences)
Location(s) of activity	The location where the work will be undertaken (usually the room number will be sufficient)
Safety Manager	The name of your local safety manager

Details of Hazardous Substances

Name of Substance (Include all substances used or produced during this activity)	Quantity	Physical Form	GHS Hazard Classification (mark all that apply)								
			 Explosive	 Flammable	 Oxidiser	 Comp. Gas	 Harmful	 Corrosive	 Toxic	 Health	 Environment
In this section include the name of each substance involved in your process and the amount used (remember to include solvents, cleaning materials and quenching agents). Consider how much you could spill when selecting the quantity of each rather than focussing on how much is involved in your process and don't forget the physical form as this affects the likely exposure routes and control measures needed. There is no need to list the individual ingredients of a mixture which has been purchased commercially and supplied with an SDS. The SDS supplied with the mixture already takes into account the hazards of each component and including them individually can actually be misleading in some cases.			In this section all you need to include is a cross (X) in the box for the relevant hazard properties associated with each substance. This will help you to identify which substances are most hazardous and will therefore require the most stringent control measures.								

Special Hazards

 Carcinogenic Substance	Note here if any substances in use are known or suspected carcinogens. These should be substituted where possible and strictly controlled if they cannot be excluded.	 Sensitising Chemical	Skin sensitisers (e.g. latex) can cause occupational dermatitis and should be handled with care. Note that you don't have to include simple irritants in this section.	 Teratogen / may Harm unborn child	Some substances can pose a risk to the developing foetus and will require additional controls to protect new and expectant mothers. Details
 Biological Material*	If the process involves hazardous biological substances details should be included here. You may also need to complete a biological CoSHH assessment.	 Radioactive Substances*	If the process involves radioactive sources the details should be included here. You will also need to complete a risk assessment covering radioactive substances.	 Explosive Atmosphere*	If the process could cause a flammable or explosive atmosphere to be generated then you will need to complete a separate DSEAR assessment covering the work.
Further details / other special hazards: This section is optional and should be used to highlight any other hazards presented by the procedure which are not included in the standard information above. This could include work being carried out at high / low temperature, under pressure etc. or details of substances with unusual reactivity such as pyrophoric substances, chemical incompatibilities etc.					

Details of potential exposure to hazardous substances

Substance(s)	Potential Exposure Route (mark all that apply)					WEL	
	Inhalation	Ingestion	Skin	Eye	Injection	8h TWA	15min STEL
This should be the same list of substances that was included above in section 1.	Consider here the most likely routes of exposure based on the physical form of the chemicals in use and the process being undertaken and identify the most likely routes by which individuals could be exposed to each substance. Where substances are being used as gases, vapours, mists or aerosols then inhalation should always be considered, where needles are in use the likelihood of injection is significantly increased.					Most common chemicals will have been assigned short term exposure limit (15min) and a time weighted average (8h) exposure limit. These refer to the maximum amount of the material which can be inhaled in the reference period (although we should always aspire to minimise this) and can be found on the SDS or in the HSE publication EH40.	

Description of activity

This section should include a brief overview of your experimental procedure covering the work you are going to undertake, as an alternative to this you could append your experimental procedure as an appendix to the document. Remember to cover all of the steps of your process including preparation, experimental procedures / chemical reactions, quenching steps, purification procedures (e.g. chromatography columns) quenching /destruction and cleaning / decontamination processes required to complete your work safely. Keep the description brief but include sufficient detail to ensure that all of the hazards are identified. There is an optional continuation page which can be used for longer procedures and you may wish to append a copy of any relevant standard operating procedures (SOPs) or techniques which are relevant. A good example of this would be the Aldrich technical bulletin AL-134 which covers the handling of air sensitive reagents.

Person(s) at risk

Include in this section a list of the individuals who might be at risk as a result of the procedure being undertaken and how they might come to harm. Try to include everyone not just yourself and your colleagues in the laboratory or workspace e.g. cleaners, estates staff, visitors etc. This will help you to identify any additional control measures required to protect these individuals e.g. induction sessions for cleaners, provision of an escort for contractors etc.

Summary of Control Measures

Risk Rating (before workplace control measures applied)	Use your own judgement to estimate the risk based on the existing (normal) control measures in your laboratory or workspace (low, medium or high)			
Procedural Controls (e.g. lone working, hygiene)	Include in this section details of any procedural / behavioural control measures that are required to undertake the process safely. This could include task specific training, prohibiting lone working or any other control measure which relies on individual to implement it properly.			
Engineering Controls (e.g. use of fume cupboard)	Include details of any engineering controls used to reduce or control exposure to hazardous substances, these could include general room ventilation, Local Exhaust Ventilation Systems (e.g. fume hoods), enclosures, blast shields etc.			
PPE Requirements (please give details) **Face fit testing required	 Dust Mask**	Insert a cross (X) into each box that applies even those that would be considered standard for your workspace. Remember to specify the type of PPE to be used where necessary (e.g. single use nitrile gloves, P3 dust mask).	 Gloves (specify type)	Where respiratory protection is indicated as part of your control measures under CoSHH it will be necessary to ensure users are formally face-fit tested by a competent person (this can be arranged via the Health and Safety Department).
	 Respirator**		 Footwear	
	 Eye Protection		 Protective Clothing	
	 Face Shield		 Other (Specify type)	
Instruction and training	Does this process require users to have developed specific skills or undergone any particular training courses to be undertaken safely. Please include the details of any training that may be required.			
Supervision required?	Is there a need for supervision or assistance when undertaking this procedure? This could include the need for a second person to be present in the area when carrying out a hazardous procedure e.g. work involving cyanide salts or other high hazard substances.			
Other safety precautions? (e.g. specialist first aid)	Include the details of any other safety precautions that are not included elsewhere. This is a good place to include any particular first aid requirements (e.g. use of calcium gluconate gel for HF exposures). You should try to avoid copying and pasting and ensure you relate the precautions to your procedure.			
Risk Rating (after workplace control measures applied)	Now that you've introduced your new control measures re-evaluate the level of risk to reflect this (low, medium or high)			

Person(s) at risk

Waste disposal procedure	Include details of the waste streams you will use to dispose of waste products at the end of your process, include details of quenching steps / sterilisation procedures and any other relevant techniques. Include details of how waste will be stored and disposed of and remember that for the most part it is not permissible to allow waste to enter the drains.
Emergency procedures	It is a requirement of the CoSHH Regulations 2002 that you plan ahead for foreseeable emergencies when working with hazardous substances. Consider what might go wrong e.g. exposure of people, leaks, spills, fires and unexpected reactions and include details of what you might do to

	mitigate the harm caused and any specialist equipment provided. It is not sufficient to say that you would call the emergency services in the event of an accident.
Air monitoring required?	Where there is a known risk of individuals being exposed to one or more hazardous substances then the need for ongoing monitoring should be considered. This section should include details of the substance(s) for which monitoring will be needed and the type of monitoring that will be undertaken.
Health surveillance required (please give details)	Some substances can cause occupational diseases such as dermatitis and asthma and are generally classified as sensitisers. These are substances that can cause individuals to develop a sensitivity over time following repeated or regular exposure. Where sensitisers are used as part of a work process and there is a risk of exposure, statutory health surveillance may be required to monitor employees' health and identify any early signs of work-related ill health. Employers have a legal duty to arrange appropriate health surveillance where required by relevant health and safety legislation. Further information, including guidance on statutory health surveillance requirements, can be found on the Health, Safety and Wellbeing website.
Medical surveillance required (please give details)	Some substances (e.g. lead) can accumulate in the body and cause occupational disease or ill health over time. Where individuals may be exposed to substances such as this may require medical surveillance. This will be arranged via the occupational health service where required. More information can be found on their website.
Supporting risk assessments (please attach where relevant)	In these sections we are looking for the details of any other specialist risk assessments that have been completed to ensure they can be read in conjunction with this one. Include reference numbers and titles where relevant.

Assessment Verification

Assessed by	Name of the person who has completed the assessment	Date	Date risk assessment was completed
Checked and approved by	Name of the person approving the work (e.g. PI / Manager)	Date	Date risk assessment was approved
Date of next review	The date when the risk assessment should be checked and reviewed to ensure it is still relevant.		

Colour Coding

	Optional section (only complete if relevant to the assessment otherwise simply mark as N/A)
	Compulsory information (where available)
	Risk rating determined at the discretion of the person completing the risk assessment

Document management

Document version

Version number	Summary of change	Date and by whom
2.0	Complete refresh after consultation	17/09/26 C Harrison

Alt format

Alternative format statement must be left at the end of each document.

If you require this document in an alternative format please contact The Health, Safety and Wellbeing Department on health.safety@ed.ac.uk or call (0131) 651 4255