

Safety Documentation

Please select the forms you require by selecting the check boxes below.
You can select more than one.

Risk Assessment

Method Statement

Chemicals COSHH

Once you have made your selections, scroll down and complete the forms.

Buttons: **[+]** will add a row to a list **[X]** will delete a row from a list

You may save this file to a local drive at any time.

When you have finished, save the file to a local drive and email it to your supervisor for authorisation.

Supervisors - There is a sign-off section at the end of the document set that must be completed.

Staff may "self authorise", (as a supervisor), but the forms must still be submitted to the DSO for approval.

IMPORTANT:

YOU ***MUST NOT*** START ANY PRACTICAL WORK UNTIL THESE FORMS HAVE BEEN RETURNED TO YOU
WITH **BOTH** YOUR SUPERVISOR'S AND DSO'S APPROVAL SIGNATURES ATTACHED.

Please complete these fields

School or Service	Wolfson School of Mechanical, Electrical and Manufacturing Engineering
Department	Centre for Biological Engineering
Originator name	Kulvindar Sikand
email address	k.p.sikand@lboro.ac.uk
Location	Garendon Wing
Project / Activity / Task	Use of Aspiration pumps
Supervisor Name	Mark Taylor

Risk Assessment

Reference

Location

Originator

Project / Activity / Task

Is this process risk assessment for a : Laboratory / Workshop General use

Category 1: Machinery & work equipment:				
Design and Construction	Mechanical hazards	Electrical hazards	Radiation hazards	
N/A	N/A	Electrical test cables current	N/A	+
Category 2: Workplace				
Restricted access				+
Slips/Trips/Falls on the level				+
Category 3: Hazardous and/or Harmful substances				
Virkon and Biological Hazards				+
Exposure to Covid-19				+
Category 4: Work activity				
N/A				+
Category 5: Work organisation				
N/A				+

Explain the risks associated with these hazards

People / Groups at risk	<input type="text" value="Operator only"/>			+
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Electrical risk associated with using the pump."/>	<input type="text" value="Very Harmful"/>	<input type="text" value="Unlikely"/>	High	
What are the control measures?	Lowers Impact	Lowers Probability	+	
<input type="text" value="Pump is periodically PAT tested. Check within current inspection date. Visually check cables and connectors before use"/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	+	
			Residual Risk	
			<input type="text" value="Low"/>	
People / Groups at risk	<input type="text" value="operator only"/>			+
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Risk in coming contact with Virkon which is a corrosive"/>	<input type="text" value="Harmful"/>	<input type="text" value="Likely"/>	High	
What are the control measures?	Lowers Impact	Lowers Probability	+	

Process Risk Assessment Form (Continued)

Virkon is contained with a plastic container and this poured away down the sink after decontamination process is complete (24hrs). It will be ensured that users have all read the COSHH assessment for Virkon.		Significantly	Significantly	x		
				Residual Risk		
				Low		
People / Groups at risk		operator only			x	
Enter risk details here:-		Impact	Probability	Risk Score		
Coming in contact with biohazard		Harmful	Likely	High		
What are the control measures?		Lowers Impact	Lowers Probability	+		
When treating the waste with Virkon to ensure that 24hrs has elapsed before disposing of waste down the sink with copious amounts of water. Do this carefully wearing PPE. The biohazard being used will have an associated approved biological risk assessment which the user must be familiar with. (See CBE SOPs)		Significantly	Significantly	x		
				Residual Risk		
				Low		
People / Groups at risk		Operator and people in proximity			x	
Enter risk details here:-		Impact	Probability	Risk Score		
Slips trips and falls		Harmful	Highly Unlikely	Low		
What are the control measures?		Lowers Impact	Lowers Probability	+		
Ensure that the working area is kept clear and tidy. Any spillages or splashes should be cleaned up with respect to CBE SOPs		Slightly	Moderately	x		
				Residual Risk		
				Low		
People / Groups at risk		Everyone in the room			x	
Enter risk details here:-		Impact	Probability	Risk Score		
Exposure to Covid-19		Very Harmful	Highly Unlikely	Medium		
What are the control measures?		Lowers Impact	Lowers Probability	+		
Follow all national, local and University Covid-19 guidelines, and respect local Lab rules. Frequent washing (20 seconds minimum)/ sanitizing of hands to be carried out. Distancing should be 2 metre, but 1M+ is allowed where all concerned are wearing face coverings and this cannot be avoided Check local Covid tier rating Ventilate enclosed areas by opening windows or artificially stimulate air movement with fans		None	Moderately	x		
				Residual Risk		
				Low		

+ Add another Risk

Process Risk Assessment Form (Continued)

Personnel Group	Maximum (Task setup/ Re-configuration)	High (Performing the task)	Medium (Observing the task)	Low (Present, but not involved)	Lone Working (Out of hours)	No Exposure Permitted	Total
-----------------	---	-------------------------------	--------------------------------	------------------------------------	--------------------------------	-----------------------	-------

Who may be at risk as a result of this activity?

Personnel Group	Maximum (Task setup/ Re-configuration)	High (Performing the task)	Medium (Observing the task)	Low (Present, but not involved)	Lone Working (Out of hours)	No Exposure Permitted	Total
Academic Staff	2	0	0	0	0	0	2
Technical Staff	2	0	0	0	0	0	2
Research Staff (PDRA)	10	0	0	0	0	0	10
Research Students (PhD)	10	0	0	0	0	0	10
Students (Undergraduate / MSc)	0	0	0	0	0	0	0
Visitors	0	0	0	0	0	0	0
Others - Over-type as needed	0	0	0	0	0	0	0
Total	24	0	0	0	0	0	24

With these controls in place, the risk is:

The activity is LOW RISK - and is effectively controlled

Safety Method Statement

Reference SAF/MEME/6801

Location Garendon Wing

Originator Kulvindar Sikand

Project / Activity / Task Use of Aspiration pumps

What equipment will be used in this activity?

+

Biological safety cabinet, aspiration pipettes

x

What training must be completed to do this activity?

+

Biological safety cabinet training

x

What chemicals are being used? (These must be included in the COSHH Form)

+

Virkon - this COSHH has been previously completed MEME656

x

Spill and accident procedures.

+

For relatively small spill use absorbent tissue to soak up spillage and dispose of via yellow stream waste. Large spill to use absorbent pads and dispose of through the yellow stream waste. Biological spill kits and chemical spill kits are readily available in the lab. When the spill occurs depends on how long the waste liquid has been treated with Virkon, to decide if the biohazard has been deactivated. Need to have a two person team, one to notify users and the other to deal with the spillage.

x

Procedure in the event of an emergency. (How to leave the process in a safe condition in such an event)

+

To replace the lid on any aspiration bottles containing waste and to switch off pump.

x

References.

+

Virkon COSHH MEME656, <https://www.fishersci.co.uk/shop/products/fb70155-pump/11533485?searchHijack=true&searchTerm=FB70155&searchType=RAPID&matchedCatNo=FB70155>

x

Detailed sequential description of the process

Process step	Precautionary measures and comments	
Open up BSC to use and prepare area.	Spray disinfectant into tissue to limit aerosols	x
Check BSC flow rate to ensure safe to use.	If flow rates are not in the safe region do not use and notify lab manager. If flow rates differ greatly but in safe range can use but notify lab manager. Users are all trained in use of BSC's.	x
Switch on aspiration pump to suck off waste media.	Ensure that the waste bottle has been changed and that the fresh bottle contains fresh Virkon. When switching waste bottles to ensure waste is treated for 24hrs and label time of treatment.	x
Once completed tissue culture process to switch off aspiration pump and shut down BSC.	If aspiration waste bottle full to label time first cam in contact so 24hrs passes before disposing of.	x

COSHH Form

Reference

Location

Originator

Project / Activity / Task

CHEMICAL NAME						Hazard Rating		OVERALL RISK: Low
<input type="text" value="Virkon powder tablets"/>						<input type="text" value="High"/>		
CAS No.	<input type="text"/>	Amount used	<input type="text" value="g"/>	Period of use (hrs)	<input type="text"/>	The process is:	<input type="text" value="Semi Closed"/>	Exposure Potential <input type="text" value="Low"/>
W.E.L. (Itel / stel)	<input type="text"/>					Physical State	<input type="text" value="Gas"/>	
						<input checked="" type="checkbox"/> Eyes <input checked="" type="checkbox"/> Skin <input type="checkbox"/> Inhaled <input type="checkbox"/> Ingested		

Hazard Statement and Description	Precaution Statement and Description	
H315 Causes skin irritation.	P264 Wash ... thoroughly after handling.	X
H318 Causes serious eye damage.	P273 Avoid release to the environment.	X
H412 Harmful to aquatic life with long lasting effects.	P280 Wear protective gloves/protective clothing/eye protection/face protection.	X
How will the precautions listed above be implemented?		
See method statement above and CBE SOPs		
Special Storage and Containment Measures	Disposal Method	
Keep containers tightly closed in a dry ventilated place. Carefully reseal after opening container. Keep in a dry place	Virkon is contained with a plastic container and this poured away down the sink after decontamination process is complete (24hrs).	X
How will spillages be dealt with?	<i>Please note: any material used to clean up a spill of hazardous material must also be disposed of as hazardous material. Click here to see spill procedures</i>	
For relatively small spill use absorbent tissue to soak up spillage and dispose of via yellow stream waste. Large spill to use absorbent pads and dispose of through the yellow stream waste. Biological spill kits and chemical spill kits are readily available in the lab.		

[+ Add another chemical](#)

Statement of work (Process to be undertaken)

[Show image](#)

Personal protection requirements not covered in the precaution statements above.

Sources of information and references

Reference to **existing approved** Risk Assessment

With the current controls, the risk of using these chemicals is: **Low**

Supervisor to check that the process involving the safe use of these chemicals has been satisfactorily evaluated

Supervisor and Departmental Safety Office (DSO) Sign-off.

Supervisors

Please check the documents above and if you want to approve them:

- 1) Electronically sign this document
- 2) Save it to a local drive (You will be prompted to do this)
- 3) eMail the signed document to the DSO.

DSO

Please review the documents above and if you want to approve them:

- 1) Enter the reference numbers as appropriate
- 2) Electronically sign this document
- 3) Save it to a local drive (You will be prompted to do this)
- 3) eMail the signed document to the originator

IF YOU DO NOT WANT TO AUTHORISE THE FORMS,

Please do not sign the form, but click the "Not Approved" check-box and return it to the originator by email stating why and what you expect them to do to put it right in the comments box below.

Not Approved

Supervisors Signature

Form Reference Numbers

Risk Assessment

SAF/MEME/6801

Method Statement

SAF/MEME/6801

COSHH Assessment

SAF/MEME/656

DSO Signature

This document set must be reviewed and re-approved at the following times:

- 1) After the first occurrence of the activity described above (Review only)
- 2) After any change to the procedure or reagents used
- 3) After any incident resulting from this activity
- 4) At least annually from the date of approval

Next Review:

19 May 2022

Review comments