

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	Maria Pavlidou; Sotiria Toumpaniari
email address	m.pavlidou@lboro.ac.uk; s.toumpaniari@lboro.ac.uk
Location	H27, H34
Project / Activity / Task	LDH cytotoxicity assay
Supervisor Name	Prof. Sotiris Korossis

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 lables current	N/A	+
Category 2: Workplace				
Slips/Trips/Falls on the level				+
Category 3: Hazardous and/or Harmful substances				
Non hazardous chemicals				+
Exposure to Covid-19				+
Category 4: Work activity				
Lone working out of hours				+
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 shock from using BSC and spectrophotometre"/>	<input type="text" value="Harmful"/>	<input type="text" value="Highly Unlikely"/>	<input type="text" value="Low"/>	
What are the control measures?	Lowers Impact	Lowers Probability	+	
<input type="text" value="Equipment has bi-annual PAT testing and visual checking of cables prior to use of equipment"/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	+	
<input type="text" value="Must be trained/inducted by competent persons in correct procedures and use of equipment"/>	<input type="text" value="Moderately"/>	<input type="text" value="None"/>	+	
			Residual Risk	
			<input type="text" value="Low"/>	
People / Groups at risk	<input type="text" value="Operator and people in proximity"/>			+
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Slips trips and falls"/>	<input type="text" value="Harmful"/>	<input type="text" value="Highly Unlikely"/>	<input type="text" value="Low"/>	
What are the control measures?	Lowers Impact	Lowers Probability	+	

Process Risk Assessment Form (Continued)

Ensure work area is kept clear and tidy, correct PPE is worn, and any spillages are cleared away to correct SOP	Slightly	Slightly	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	None	Moderately	x	
			Residual Risk	
			Low	
+ Add another Risk				

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	0	0	0	0	0	0	0
Technical Staff	0	1	0	0	0	0	1
Research Staff (PDRA)	0	1	0	0	0	0	1
Research Students (PhD)	0	1	0	0	0	0	1
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	0	3	0	0	0	0	3

With these controls in place, the risk is:

Process Risk Assessment Form (Continued)

The activity is LOW RISK - and is effectively controlled

Safety Method Statement

Reference SAF/MEME/6806

Location H27, H34

Originator Maria Pavlidou; Sotiria Toumpaniari

Project / Activity / Task LDH cytotoxicity assay

What equipment will be used in this activity?

	+
Spectrophotometre (Omega Fluostar)	X
96 flat bottom well plates	X
Biological Safety Cabinet	X
Tissue culture 96 well plates	X
Pipettes	X
pipette tips	X
50 mL Falcon tube	X

What training must be completed to do this activity?

	+
Cell culture	X
Use of spectrophotometre	X

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

	+
Substrate mix (Non hazardous)	X
Assay buffer (Non hazardous)	X
Stop solution (Non hazardous)	X
LDH Positive Control (Non hazardous)	X

Spill and accident procedures.

	+
In case of contact with eyes, remove contact lenses, if present and easy to do and immediately flush eyes with copious amounts of water for several minutes. In case of contact with skin, immediately wash skin with soap and copious amounts of water.	X
Absorb the spillage using clean with absorbent material and dispose of used towels and gloves in the autoclave waste bag.	X

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

	+
Leave note with a name of the operator and date mentioning not to move anything from the area and dispose contaminated gloves.	X

References.

+

Safety Method Statement (Continued)

CBE code of practice, SOP009, SOP109, SOP037, SOP038, SOP039	X
<p>https://www.thermofisher.com/document-connect/document-connect.html?url=https%3A%2F%2Fassets.thermofisher.com%2FTFS-Assets%2FLSG%2FSDS%2FC20300COMPONENTA_MTR-EULT_BE.pdf&title=QzlwMzAwQ09NUE9ORU5UQQ==</p> <p>https://www.thermofisher.com/document-connect/document-connect.html?url=https%3A%2F%2Fassets.thermofisher.com%2FTFS-Assets%2FLSG%2FSDS%2FC20300COMPONENTB_MTR-EULT_BE.pdf&title=QzlwMzAwQ09NUE9ORU5UQg==</p> <p>https://www.thermofisher.com/document-connect/document-connect.html?url=https%3A%2F%2Fassets.thermofisher.com%2FTFS-Assets%2FLSG%2FSDS%2FC20300COMPONENTD_MTR-EULT_BE.pdf&title=QzlwMzAwQ09NUE9ORU5URA==</p> <p>https://www.thermofisher.com/document-connect/document-connect.html?url=https%3A%2F%2Fassets.thermofisher.com%2FTFS-Assets%2FLSG%2FSDS%2FC20300COMPONENTE_MTR-EULT_BE.pdf&title=QzlwMzAwQ09NUE9ORU5URQ==</p>	X

Detailed sequential description of the process

Process step	Precautionary measures and comments	+
Transfer well plate with cell culture samples in the BSC. Transfer 50uL of supernatant into a transparent 96 well plate.	Wear appropriate PPE.	X
Add 50uL of working solution and incubate at RT for 30 min.	Use multipipette or repeater pipette if it is available. Ensure that for every experiment you incubate for exactly the same time.	X
Add 50uL of stop solution	Use multipipette or repeater pipette if it is available.	X
Transfer to spectrophotometre and measure absorbance at 490nm and 680nm	Ensure that the bottom of the plate is clear to avoid mistakes in the reading.	X

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/6806

Method Statement

SAF/MEME/6806

COSHH Assessment

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:

21 May 2021

Review comments