Loughborough University **Centre for Biological Engineering**



Safety Documentation

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

Method Statement



Risk Assessment

Chemicals COSHH \checkmark

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	Oliver George Frost		
email address	o.g.frost@lboro.ac.uk		
Location	CBE Labs		
Project / Activity /	Task Detection of senescent cells using Abcam Kit		
Supervisor Name	Prof Rob J Thomas		

Loughborough University Centre for Biological Engineering COSHH Form



COSHH F	orm			Reference	SAF/MEME/	2129-2131		
Location	CBE Labs	;		Originator	Oliver Georg	ge Frost		
Project / Activity /	/Task Detectio	n of senescent cells using	Abcam Kit	_				
CHEMICAL NAM	1E			<u> </u>		Hazard		X
1x Fixative Solu contains glutar	ıtion, aldehyde and			$\langle \rangle \langle \rangle$		Rating High	OVERAL	.L
CAS No. 111-30	0-8 / 50-00-0	Amount Period of used use (hrs)	The process is: Physi	ical State	Eyes ✔ Skin	Exposure Potential		_
W.E.L. (Itel / stel)		400 ml 0.1	Semi Closed Non-	Volatile Liquid] ✓ Inhaled ☐ Ingested	Low	Mediun	n
This chemical has a h	high health risk asso	ciated with it.						
Haza	ard Statement a	nd Description	Pre	caution Statem	ent and Desc	ription		+
H317 May cause a	n allergic skin reactio	on.	P201 Obtain special ins	structions before us	e.			x
H341 Suspected of	f causing genetic de	fects.	P261 Avoid breathing of	dust/fume/gas/mist	t/vapours/spray.			x
H350 May cause ca	ancer.		P362 Take off contaminated clothing and wash before reuse.				x	
EUH208 Contains <name of="" sensitising="" substance="">. May produce an a</name>		P501 Dispose of contents/container to				x		
EUH071 Corrosive to the respiratory tract. Contains lead. Should not be		P280 Wear protective gloves/protective clothing/eye protection/face protection.			x			
							x	
								x
Justify the use of this chemical:		Measure senescent alternative as need will be used and ap	ce induced by c ls consistency w opropriate PPE s	hemotherapy vith previous specified.	y agents. No work, small	quantities		
How will the p	recautions listed	above be implemented?						
The work will o	ccur in a fume h	ood. Small amounts of the	solution will be use	ed (1-5ml) to fix	the samples	for 10-15 mi	ns.	
Special Storag	e and Containm	ent Measures	Disposal Method				+	
Store at 4C and keep within kit container.		Aqueous waste - cytotoxic liquid. Not autoclaved. Must be removed and placed in Gas Pod 2 when work is complete. Use suitable disposable winchester bottle and label for collection, at each time the bottle is moved it must be placed in a bottle holder. SOP039.			x			
How will spillages be dealt with?		Please note: any material used t	o clean up a spill of hazard Click here to se	ous material must also re spill procedures	be disposed of as ho	zardous material.		
Other - Chemic	al spill kit and re	fer to SOP039.						
CHEMICAL NAM	1E	Hazard Rating High		OVERAL RISK:	X .L			
CAS No. 7240-9	00-6	used use (hrs)	The process is: Physi	ical State hilised Solid	Skin	Potential	Low	
Hazard Statement and Description		Precaution Statement and Description			+			

COSHH Form (Continued)

			1	
H302 Harmful if swallowed.		P280 Wear protective gloves/protective clothing/eye protection/face protection.		
H312 Harmful in contact with skin.		P261 Avoid breathing dust/fume/gas/mist/vapours/spray.		
H332 Harmful if inhaled.		P264 Wash thoroughly after handling.		
		P312 Call a POISON CENTER or doctor/physician if you feel unwell.	x	
		P501 Dispose of contents/container to	x	
How will the precautions listed above be implemented?				
The work will occur in a fume hood. Very small amounts c		f the solution will be used (25-50ul) to stain the samples for 4 hours.		
Special Storage and Containm	ent Measures	Disposal Method		
Store at -20 in a box.		Biological waste (See specific RA)	x	
How will spillages be dealt wit	h?	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		
Absorbent cloth / tissue		I		
CHEMICAL NAME		Hazard	X	
100X Staining supplement			.L	
	Amount Period of	Eyes Exposure RISK:		
CAS No. 14459-95-1	used use (hrs)	The process is: Physical State Skin Potential		
W.E.L. (Itel / stel)	W.E.L. (Itel / stel)			
This chemical has a high health risk asso	ciated with it.			
Hazard Statement a	nd Description	Precaution Statement and Description		
H361 Suspected of damaging fertility c	or the unborn child.	P280 Wear protective gloves/protective clothing/eye protection/face protection.		
		P201 Obtain special instructions before use.		
		P202 Do not handle until all safety precautions have been read and understood.		
		P308 + P313 IF exposed or concerned: Get medical advice/attention.		
		P501 Dispose of contents/container to		
Justify the use of this chemical:		Measure senescence induced by chemotherapy agents. No alternative as needs consistency with previous work, small quantities will be used and appropriate PPE specified.		
How will the precautions listed above be implemented?				
The work will occur in a fume hood. Small amounts of the		solution will be used (1-5ml) to stain the samples for 4 hours.		
Special Storage and Containment Measures		Disposal Method		
Store at 4C in kit container.		Aqueous waste - cytotoxic liquid. Not autoclaved. Must be removed and placed in Gas Pod 2 when work is complete. Use suitable disposable winchester bottle and label for collection, at each time the bottle is moved it must be placed in a bottle holder. SOP039.		
How will spillages be dealt with?		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		
Other - Chemical spill kit and refer to SOP 039.				

+ Add another chemical

COSHH Form (Continued)

Statement of work (Process to be undertaken)

Senescence will be assessed with this kit to confirm it has been established after chemotherapy treatment. All of this work is to take place in a ducted BSC.

Personal protection requirements not covered in the precaution statements above.

PPE - including lab coat, shoe covers, gloves, goggles.	
Sources of information and references	Reference to existing approved Risk Assessment
Safety Data Sheet abcam	
With the current controls, the risk of using these chemicals is:	Medium

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

Loughborough University Centre for Biological Engineering



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.

<u>DSO</u>

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 Numb	pers		
Risk Assessment	Method Statement	COSHH Assessment		
		SAF/MEME/2129-2131		
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 Nov 2024

Review comments