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**

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	Generation of senescent (old) cells in culturing cells
Supervisor Name	Prof Rob J Thomas

Version : 2.34

Loughborough University
Centre for Biological Engineering

COSHH Form

Reference: SAF/MEME/2119

Location: CBE Labs

Originator: Oliver George Frost

Project / Activity / Task: Generation of senescent (old) cells in culturing cells

CHEMICAL NAME

Etoposide

CAS No. 33419-42-0

W.E.L. (Itel / stel)

Hazard Rating: High

OVERALL RISK: Medium

Amount used		Period of use (hrs)	The process is:	Physical State
25	mg	0.1	Semi Closed	Lyophilised Solid

Exposure Potential: Low

- [ ] Eyes
- [ ] Skin
- [ ] Inhaled
- [x] Ingested

This chemical has a high health risk associated with it.

Hazard Statement and Description	Precaution Statement and Description
H302 Harmful if swallowed.	P202 Do not handle until all safety precautions have been read and understood.
H350 May cause cancer.	P264 Wash … thoroughly after handling.
H340 May cause genetic defects.	P270 Do no eat, drink or smoke when using this product.
H360FD May damage fertility. May damage the unborn child.	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unw
	P308 + P313 IF exposed or concerned: Get medical advice/attention.

Justify the use of this chemical:	Induce senescence to cells. Chemical is a chemotherapy agent. 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 ducted BSC. Once dissolved, the solution will be aliquoted and very small amounts (1-10ul) will be used for the induction of senescence.

Special Storage and Containment Measures	Disposal Method
Dissolve in DMSO and aliquots stored at -20C.	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

Statement of work (Process to be undertaken)

Senescence will be induced using 300nM of this chemical. All of this work is to take place in fume hood or ducted BSC.

Show image

Personal protection requirements not covered in the precaution statements above.

PPE including lab coat, gloves, shoe covers, goggles.

COSHH Form (Continued)

Sources of information and references	Reference to **existing approved** Risk Assessment
Safety Data Sheet MERCK	

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

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: Rob Thomas — Digitally signed by Rob Thomas Date: 2023.11.06 10:05:25 Z

Form Reference Numbers

Risk Assessment	Method Statement	COSHH Assessment
		SAF/MEME/2119

DSO Signature: Keven G Smith — Digitally signed by Keven G Smith Date: 2023.11.21 11:55:40 Z

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