

## 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	Carolyn Kavanagh
email address	c.l.kavanagh@lboro.ac.uk
Location	Centre for Biological Engineering Laboratory Areas and T208B Wolfson Sc
Project / Activity / Task	Use and Maintenance of -20 Freezers
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: Workplace	+
Falling/moving objects/materials	X
Storage and Stacking	X
Localised cold surfaces	X
Category 2: Hazardous and/or Harmful substances	+
Biological substances (Infection)	X
Other Substance related hazard ( hazardous components of reagents)	X
Flammable substances	X
Category 3: Activity	+
Lone working out of hours	X
Category 4: Organisation	+
	X

#### Explain the risks associated with these hazards

People / Groups at risk	<input type="text" value="Operator only"/>			X
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Risk of Infection from biological material"/>	<input type="text" value="Harmful"/>	<input type="text" value="Unlikely"/>	Medium	
What are the control measures?	Lowers Impact	Lowers Probability	+	
<input type="text" value="All Biological material is of a good provenance and screened for infectious agents. Any material which is not screened is used under special quarantined controlled conditions."/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	X	
<input type="text" value="All Laboratory users wear gloves at all times and other PPE as appropriate"/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	X	
<input type="text" value="All biological material in the - 20 Freezers is contained in secondary containers /racks and is in a frozen state."/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	X	
<input type="text" value="Only Authorised workers have access to the freezers"/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	X	
			Residual Risk	
			Low	
People / Groups at risk	<input type="text" value="Operator only"/>			X

## Process Risk Assessment Form (Continued)

Enter risk details here:- Electrical shock from using equipment	Impact Harmful	Probability Highly Unlikely	Risk Score Low
What are the control measures?	Lowers Impact	Lowers Probability	+
Equipment has 2 yearly PAT testing and visual checking of cables and plug	Significantly	Significantly	x
			Residual Risk Low
People / Groups at risk	Operator only		x
Enter risk details here:- Handling cold surfaces	Impact Slightly Harmful	Probability Likely	Risk Score Medium
What are the control measures?	Lowers Impact	Lowers Probability	+
Laboratory users are provided with blue thermal insulated gloves to wear to protect hands when handling items from the -20 freezer	Significantly	Significantly	x
Importance of PPE and how to use it is part of induction process	Significantly	Significantly	x
			Residual Risk Low
People / Groups at risk	Operator and people in proximity		x
Enter risk details here:- Risk of falling items from the -20 freezer	Impact Slightly Harmful	Probability Unlikely	Risk Score Low
What are the control measures?	Lowers Impact	Lowers Probability	+
Material stored in the -20 freezers should be stored in labeled boxes where possible and/or stacked neatly.	Moderately	Moderately	x
			Residual Risk Low
People / Groups at risk	Operator only		x
Enter risk details here:- Working out of hours	Impact Slightly Harmful	Probability Likely	Risk Score Medium
What are the control measures?	Lowers Impact	Lowers Probability	+
Laboratory users are fully trained before authorised access is given to the labs. Part of the training includes out of hours procedures. They also have to complete an out of hours risk assessment stating the work they intend to do.	Significantly	Significantly	x
			Residual Risk Low
People / Groups at risk	Everyone in the room		x
Enter risk details here:- Risk of fire from storage of flammable substances	Impact Harmful	Probability Likely	Risk Score High
What are the control measures?	Lowers Impact	Lowers Probability	+

## Process Risk Assessment Form (Continued)

Freezers should be spark free. If they are not spark free laboratory users are trained not to store flammable substances within them.	Significantly	Significantly	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Risk from hazardous components in reagents stored	Harmful	Highly Unlikely	Low	
What are the control measures?	Lowers Impact	Lowers Probability	+	
All reagents with hazardous component have a COSHH and are stored appropriately	Significantly	Significantly	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Injury from maintenance of freezer	Slightly Harmful	Highly Unlikely		
What are the control measures?	Lowers Impact	Lowers Probability	+	
Only Authorised persons perform maintenance and trained to do so. Qualified engineers perform maintenance through permit to work system . Freezers are switched off for repairs ( once materials are transferred)	Significantly	Significantly	x	
SOP016 details how to perform maintenance safely.	Significantly	Significantly	x	
PPE is provided	Significantly	Significantly	x	
			Residual Risk	
			Low	
+ Add another Risk				

With these controls in place, the risk is:

**The activity is LOW RISK - and is effectively controlled**

# Safety Method Statement

Reference SAF/MM6396

Location Centre for Biological Engineering Laboratory Areas and Originator Carolyn Kavanagh

Project / Activity / Task Use and Maintenance of -20 Freezers

What equipment will be used in this activity? +

-20 Freezers in H18, H23, H25, H27, H29, H34 and CTMF in the CBE and T208b in the Wolfson School X

Calibrated thermometer for temperature monitoring X

What training must be completed to do this activity? +

CBE Laboratory induction training X

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

none X

Spill and accident procedures. +

See SOP038. Accidents are reported through University accident system X

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

Close freezer doors to maintain temperature. Inform fire service of any hazards X

References. +

SOP016 Use and Maintenance of Fridges and Freezers X

## Detailed sequential description of the process

Process step	Precautionary measures and comments	+
Please refer to SOP016		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/MM6396

Method Statement

SAF/MM6396

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:

12/01/2021

Review comments