

## 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    [- ] 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	CBE Laboratories ( H22, H29, H34, CTMF ) and T208b Wolfson School
Project / Activity / Task	Use and Maintenance of the Analytical Weighing Balances
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
Confined work area (striking objects)	X
Category 2: Hazardous and/or Harmful substances	+
Toxic substances	X
Corrosive substances	X
Irritant substances	X
Oxidising substances	X
Category 3: Activity	+
Lone working out of hours	X
Electrical Hazard	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="Mis-use of Weighing Balances"/>	<input type="text" value="Slightly Harmful"/>	<input type="text" value="Unlikely"/>	Low
What are the control measures?	Lowers Impact	Lowers Probability	+
<input type="text" value="All CBE Laboratory users are trained on the use and take care when using the balances and associated consequences of defective equipment if mis-used"/>	<input type="text" value="Moderately"/>	<input type="text" value="Moderately"/>	X
			Residual Risk
			Low
People / Groups at risk	<input type="text" value="Operator only"/>		X
Enter risk details here:-	Impact	Probability	Risk Score
<input type="text" value="Electrical hazard"/>	<input type="text" value="Harmful"/>	<input type="text" value="Highly Unlikely"/>	Low
What are the control measures?	Lowers Impact	Lowers Probability	+
<input type="text" value="All Balances are PAT tested 2 yearly and leads checked for signs of wear regularly."/>	<input type="text" value="Moderately"/>	<input type="text" value="Moderately"/>	X

## Process Risk Assessment Form (Continued)

Operators are trained not to get liquids /dry chemical dust into electrics and to clean the balances after use.	Moderately	Moderately	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Lone working with balances	Slightly Harmful	Likely	Medium	
What are the control measures?	Lowers Impact	Lowers Probability	+	
All Operators are fully trained before being allowed to work out of hours	Moderately	Moderately	x	
All operators have a valid out of hours risk assessment for working out of hours detailing the work. Users use the lone working app when working out of hours.	Moderately	Moderately	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Weighing out hazardous substances	Harmful	Likely	High	
What are the control measures?	Lowers Impact	Lowers Probability	+	
All Operators have approved COSHH for chemicals they are using.	Moderately	Moderately	x	
All Operators wear PPE ( gloves, safety glasses) when handling chemicals	Significantly	Significantly	x	
Operators use the weighing balance in the Fume Cupboard for hazardous material which is high risk and requires extra safety measures.	Significantly	Significantly	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Trapped fingers in doored balances	Harmful	Highly Unlikely	Low	
What are the control measures?	Lowers Impact	Lowers Probability	+	
Doors around the balances are manual opening so low risk of trapped fingers.	Moderately	Moderately	x	
Handling can be slightly awkward while weighing material using balances with doors but careful slow movements can avoid spillages. Operators will be trained how to use and handle the balances.	Moderately	Moderately	x	
			Residual Risk	
			Low	

+ Add another Risk

## Process Risk Assessment Form (Continued)

With these controls in place, the risk is:

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

# Safety Method Statement

Reference SAF/MM/6504

Location CBE Laboratories ( H22, H29, H34, CTMF ) and T208b W Originator Carolyn Kavanagh

Project / Activity / Task Use and Maintenance of the Analytical Weighing Balances

## What equipment will be used in this activity?

	+
APX-100 Denver Balance in H34	X
PK-401 Denver Balance in H22	X
Ohaus Adventurer Pro Balance in T208b	X
Ohaus Balance in T208b	X
Ohaus Balance in H29	X
Mettler Toledo Analytical Balance in H34	X
Mettler Teledo AT261 Delta Range Balance in H34 x2	X
Weighing Boats	X
Calibration Weights	X
Spatula	X
Arlyn Balance in CTMF x2	X
Ohaus Balance in CTMF	X

## What training must be completed to do this activity?

	+
CBE Laboratory Induction Training . Lab Leader/supervisor Training.	X

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

	+
None . The dry Chemicals weighed out using the balances will have individual COSHH Risk Assessments	X

## Spill and accident procedures.

	+
SOP038 Spill Response offers guidance on how to deal with spills. Any accidents must be reported through the University accident reporting procedures. Any dry chemicals spilled onto the weighing balances must be cleaned up immediately following guidance is the COSHH and SDS.	X

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

	+
If possible switch off the weighing scales . If you are in the middle of weighing out material and do not have time to finish close the door of the balance and leave a note with contact details. In the event of a fire if the material is flammable ensure the fire brigade are informed.	X

## References.

	+
SOP018, SOP038, SOP026	X

## Detailed sequential description of the process

Process step	Precautionary measures and comments	+
See SOP018 for full details. Switch on weighing balance and allow to warm up for 30 minutes.	Check PAT testing of appliance is in date. Check leads and equipment is safe to use.	X

## Safety Method Statement (Continued)

Process step	Precautionary measures and comments	+
Perform calibration of balances using weights if required. Please see SOP018.		X
Place weighing boat onto balance and 'zero'. See SOP018.		X
Carefully decant required amount of dry chemical from container into weighing boat using spatula until desired weight is reached.	Wear gloves and safety glasses when handling chemicals. If chemical is hazardous and it states a fume cupboard is required to be used in the COSHH ensure the weighing scales in the fume cupboard are used. Please refer to SOP026 for use of Fume Cupboard.	X
Remove weighing boat carefully from the weighing balance .	Return chemical to correct chemical cabinet	X
Clear up any spilled chemical and carefully wipe the balance plate with the soft brush.		X
Switch off the weighing balance and shut the door to the balance ( if it has one).		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/MM/6504

Method Statement

SAF/MM/6504

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:

14/07/2021

Review comments