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.

| ✓ Risk Assessment | ✓ Method Statement | Chemicals COSHH |
|--------------------------------------|--|-----------------|
| Once you have made your select | tions, 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 of | drive at any time. | |

When you have finished, save the file to a local drive and email it to your supervisor for authorisation.

<u>Supervisors</u> - 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 | Kulvindar Sikand | | | |
| email address | k.p.sikand@lboro.ac.uk | | | |
| Location | T208 Wolfson School | | | |
| Project / Activity / | Task Use of Elga Purelab Option-S 7/15 | | | |
| Supervisor Name | Mark Taylor | | | |

Version: 2.19

© 2018 Loughborough University. All rights reserved

Loughborough University Centre for Biological engineering



Risk Assessment

| NISK ASSESSIII | ient | | | Reference | SAF/MM6431 |
|---------------------------|------------------------------------|--------------|---------------|-----------|------------|
| Location | T208 Wolfson School | | Originator | Kulvindar | Sikand |
| Project / Activity / Task | Use of Elga Purelab O _l | otion-S 7/15 | | | |
| Is this process risk a | ssessment for a : | | ○ General use | j | |

| Category 1: Machinery & work equipment: | | | | |
|---|--------------------|--------------------------------|-------------------|---|
| Design and Construction | Mechanical hazards | Electrical hazards | Radiation hazards | + |
| N/A | N/A | Electrical test lables current | | X |
| Category 2: Workplace | | | | + |
| Restricted access | | | | X |
| Category 3: Hazardous and/or Harmful substances | | | | |
| N/A | | | | |
| Category 4: Work activity | | | | |
| Awkward/Heavy lifting/Handling | | | | |
| Category 5: Work organisation | | | | |
| The is equipment used by lab u | sers. | | | X |

| Explain the risks asso | ociated with these hazards | | | | | |
|--|---|------------------|--------------------|------------|-----------|--|
| People / Groups at risk | Operator only | | | | х | |
| Enter risk details here:- | | Impact | Probability | Risk Score | | |
| Heavy water containers | moved (10L) - approx. 10kg | Slightly Harmful | Unlikely | | Low | |
| What are the control measures | ? | Lowers Impact | Lowers Probability | + | | |
| Users to be careful wher | n moving water container use handle. | Significantly | Significantly | x | | |
| | | | | Resi | dual Risk | |
| | | | | | Low | |
| People / Groups at risk | Operator and people in proximity | | | | X | |
| Enter risk details here:- | | Impact | Probability | Risk S | core | |
| Trips and falls while moving the container of water. | | Harmful | Unlikely | Medium | | |
| What are the control measures | ? | Lowers Impact | Lowers Probability | + | | |
| handling procedure and | he operator to maintain good manual I to be aware of other users in the area. Good e floors are free of obstructions and dry. | Significantly | Significantly | x | | |

Process Risk Assessment Form (Continued)

| | | | | dual Risk |
|---|------------------|--------------------|--------|-----------|
| | | | | Low |
| People / Groups at risk Operator and people in proximity | | | | X |
| Enter risk details here:- | Impact | Probability | Risk S | core |
| Spillage of water when moving the container. | Slightly Harmful | Unlikely | | Low |
| What are the control measures? | Lowers Impact | Lowers Probability | + | |
| To ensure that the cap on top of the container is secure. | Significantly | Significantly | x | |
| | | | Resid | dual Risk |
| | | Low | | |
| + Add anothe | er 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 | 2 | 0 | 0 | 0 | 0 | 2 |
| 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 | 4 | 0 | 0 | 0 | 0 | 4 |

With these controls in place, the risk is:

The activity is LOW RISK - and is effectively controlled

Loughborough University Centre for Biological engineering Safety Method Statement



| Salety Metri | ou statement | Reference SAF/MM6431 |
|---------------------------|---|---|
| Location | T208 Wolfson School | Originator Kulvindar Sikand |
| Project / Activity / Task | Use of Elga Purelab Option-S 7/15 | |
| What equipment wi | II be used in this activity? | + |
| Water purifier and wate | er containers. | X |
| What training must | be completed to do this activity? | + |
| Basic manual handling | and simple instructions on how to dispense water. | X |
| What chemicals are | being used? (These must be included in the CC | SHH Form) + |
| None. | | X |
| Spill and accident p | rocedures. | + |
| mops and buckets are f | e water. Proper signage will be put in placed to show the ound in T208. Additional care should be taken to ensure t come into contact with any spillage. The preventative mo g it. | hat there is no electrical equipment on the |
| Procedure in the eve | ent of an emergency. (How to leave the process in a | safe condition in such an event) + |
| Turn tap off and leave. | | X |
| References. | | + |
| Manual for Elga Purelab | Option-S 7/15 | X |

Detailed sequential description of the process

| Process step | Precautionary measures and comments | + |
|---|--|---|
| Place empty container on floor next to water purifier and place hose into container and turn tap. | Hose placed in sink after using. | X |
| Once filled to required level switch off tap. | | X |
| Replace lid on container and remove carefully using handle from floor into lab next to autoclave. | Lift without twisting your back and maintain good posture, largest container filled is 10 L. | x |

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.

DSO

Please review the documents above and if you want to approve them:

1) Enter the reference numbers as appropriate

| | is document e (You will be prompted to do this) ument to the originator | | |
|--|---|---------------|--------------|
| Please do not sign the fo | ANT TO AUTHORISE THE FORMS, orm, but click the "Not Approved" check-boand what you expect them to do to put it righ | | Not Approved |
| Supervisors Signature | | | |
| | Form Reference | Numbers | |
| Risk Assessment SAF/MM6431 | Method Statement SAF/MM6431 | COSHH Assessi | ment |
| DSO Signature | | | |
| After the first occurrence After any change to the | ust be reviewed and re-approved a e of the activity described above (Review on procedure or reagents used | | |
| 3) After any incident result4) At least annually from the | | Next Review: | 30/04/2021 |
| Review comments | | | |
| | | | |
| | | | |
| | | | |
| | | | |