Loughborough University Department of Chemical 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 | | | | | |
| 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 <u>MUST NOT</u> START ANY PRACTICAL WORK UNTIL THESE FORMS HAVE BEEN RETURNED TO YOU WITH **BOTH** YOUR SUPERVISOR'S AND DSO'S APPROVAL SIGNATURES ATTACHED.

| Please compl | ete these fields |
|-----------------------------------|--|
| School or Service | School of Aeronautical, Automotive, Chemical and Materials Engineering |
| Department | Department of Chemical Engineering |
| Originator name | Jenna Davis |
| email address | j.davis@lboro.ac.uk |
| Location | СВЕ |
| Project / Activity / ⁻ | Fish Oils as antimicrobials |
| Supervisor Name | Dr Elizabeth Ratcliffe |

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COSHH Form

| COSHH Form | | | Reference | 19MP-ER-0010 | | |
|--|--|--|---|-------------------------------|-----------------|--------|
| ocation | | | Originator | Jenna Davis | | |
| Project / Activity / Task Fish Oils | as antimicrobials | | | | | |
| CHEMICAL NAME | | | A A | Hazard | | X |
| Cefaclor | | | $\langle \! \rangle \langle \! \rangle$ | Rating High | OVERAL | .L |
| CAS No. 53994-73-3 | Amount Period of used use (hrs) | The process is: Physica | l State | Eyes Exposure Skin Potential | RISK: | |
| W.E.L. (Itel / stel) | 0.2 g 2 | Semi Closed Non-Vo | latile Liquid | ✓ Inhaled Low | Mediun | 1 |
| This chemical has a high health risk associ | ciated with it. | | | | | |
| Hazard Statement ar | nd Description | Prec | caution Statem | ent and Description | | + |
| H317 May cause an allergic skin reaction | n. | P280 Wear protective gl | oves/protective cl | lothing/eye protection/face p | rotection. | x |
| H334 May cause allergy or asthma sym | ptoms or breathing difficulties i | P261 Avoid breathing de | ust/fume/gas/mist | t/vapours/spray. | | X |
| | | P342 + P311 If experience | cing respiratory sy | mptoms: Call a POISON CENT | ER or doctor/p | x |
| Justify the use of this chemical: | This chemical is needed as a positive control in antimicrobial susceptibility testing and is effective against all of the organisms outlined in BRA CBE167 | | | | | |
| How will the precautions listed | above be implemented? | | | | | |
| Cefaclor will be dissolved in PBS prior to application to the work Only to be used and prepared within the confines of the BSC, so risk of inhalation is greatly reduced. Use of PPE including gloves and lab coats minimise risk of contact with the skin | | | uding | | | |
| Special Storage and Containm | ent Measures | Disposal Method | | | + | |
| Store in a cool dry place in tightly sealed containers | | Cefaclor requires incineration, waste will be collected and disposed of via the cyctotoxic purple waste stream. | | | x | |
| 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 | | | | |
| Absorbent cloth / tissue | I | | | | | |
| CHEMICAL NAME Resolvin D2 | (b) | | | Hazard Rating Medium | OVERAL | X L |
| CAS No. 810668-37-2 | Amount Period of used use (hrs) | The process is: Physica | l State | Eyes Exposure Skin Potential | RISK: | \neg |
| W.E.L. (Itel / stel) | 0.05 ml 2 | Semi Closed Volatile | Liquid | Inhaled Low | Low | |
| | | | | | | |
| Hazard Statement ar | nd Description | Prec | caution Statem | ent and Description | | + |
| H225 Highly flammable liquid and vapour. | | P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. | | | X | |
| No Hazard Statements applicable | | P280 Wear protective gloves/protective clothing/eye protection/face protection. | | | X | |
| No Hazard Statements applicable | | P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminate | | | , | |
| No Hazard Statements applicable | | P303 + P361 + P353 IF C | N SKIN (or hair): R | emove/Take off immediately | all contaminate | X |

COSHH Form (Continued)

| Use of full PPE - lab coats, gloves, shoe covers and goggles when needed. Flammable component is ethanol used to store the ubstance. Will be stored in the freezer until use, when no more than 0.05mL is suspended in 8mL PBS, making the ethanol sighly dilute. | | |
|---|--|---|
| Special Storage and Containment Measures | Disposal Method | + |
| Store in a tightly sealed container away from heat, sparks and flame. Chemical is stored in the freezer at -80C | Biological waste (See specific RA) | |
| 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 | |
| Absorbent cloth / tissue | | |

| + Add another chemical | al | |
|---|--|-------------------|
| Statement of work (Process to be undertaken) Used in bacterial killing assay as outlined in BRA167 | | Show image |
| Personal protection requirements not covered in the precaution statements a | above. | |
| Sources of information and references | Reference to <u>existing approved</u> Risk Asses | sment |
| MSDS from supplier | CBE167 | |
| 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

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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)

| Please do not sign the fo | ument to the originator ANT TO AUTHORISE THE FORMS, orm, but click the "Not Approved" check-box and ret and what you expect them to do to put it right in the o | | Not Approved |
|---------------------------------|---|-------------------------------|--------------|
| Supervisors Signature | | | |
| | Form Reference Num | bers | |
| Risk Assessment 19MP-ER-0010 | Method Statement 19MP-ER-0010 | COSHH Assessme | nt |
| DSO Signature | | | |
| | ng from this activity | ollowing times: Next Review: | |
| Review comments | | | |
| | | | |

Jenna Davis 13-Nov-2019 Page 3 of 3