# 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 | 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 | Centre for Biological Engineering |
| Project / Activity / Task | Fish Oils as Antimicrobials |
| Supervisor Name | Dr Elizabeth Ratcliffe |

Version : 2.20

# Loughborough University
# Department of Chemical Engineering

## COSHH Form

Reference: 19MP-ER-0001JD

Location: Centre for Biological Engineering

Originator: Jenna Davis

Project / Activity / Task: Fish Oils as Antimicrobials

**CHEMICAL NAME**

**Glycerin and Ethylene Glycol**

CAS No. 56-81-5, 107-21-1

W.E.L. (Itel / stel)

Hazard Rating: High

OVERALL RISK: Low

| Amount used | | Period of use (hrs) | The process is: | Physical State | | Exposure Potential |
|---|---|---|---|---|---|---|
| 0.5 | ml | 1 | Semi Closed | Non-Volatile Liquid | ☐ Eyes ☐ Skin ☐ Inhaled ☐ Ingested | Low |

| Hazard Statement and Description | Precaution Statement and Description |
|---|---|
| H373 Causes damage to organs through prolonged or repeated expos | P260 Do not breathe dust/fume/gas/mist/vapours/spray. |
| | P314 Get medical advice/attention if you feel unwell. |

How will the precautions listed above be implemented?

PPE including gloves and howie lab coats to be worn at all times. All work is carried out within the BSC to minimise exposure and risk of contact.

| Special Storage and Containment Measures | Disposal Method |
|---|---|
| To be kept in a dry, cool, well ventilated place. | Waste to be disposed of via the cytotoxic route. After use with bacteria in well plates, virkon will be added and lefts for 24h to kill bacteria. Waste liquid will then be collected in absorbent material and placed into purple waste stream. |

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

**CHEMICAL NAME**

**Dithiotheritol (DTT)**

CAS No. 3483-12-3

W.E.L. (Itel / stel)

Hazard Rating: High

OVERALL RISK: Low

| Amount used | | Period of use (hrs) | The process is: | Physical State | | Exposure Potential |
|---|---|---|---|---|---|---|
| 0.5 | ml | 1 | Semi Closed | Non-Volatile Liquid | ☐ Eyes ☑ Skin ☐ Inhaled ☑ Ingested | Low |

| Hazard Statement and Description | Precaution Statement and Description |
|---|---|
| H302 Harmful if swallowed. | P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remov |
| H315 Causes skin irritation. | P302 + P352 IF ON SKIN: Wash with plenty of soap and water. |
| | P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unw |
| | P260 Do not breathe dust/fume/gas/mist/vapours/spray. |
| | P270 Do no eat, drink or smoke when using this product. |
| | P280 Wear protective gloves/protective clothing/eye protection/face protection. |

How will the precautions listed above be implemented?

# COSHH Form (Continued)

PPE including gloves and howie lab coats to be worn at all times. All work is carried out within the BSC to minimise exposure and risk of contact.

| Special Storage and Containment Measures | Disposal Method | + |
|---|---|---|
| To be kept in a dry, cool, well ventilated place. | Waste to be disposed of via the cytotoxic route. After use with bacteria in well plates, virkon will be added and lefts for 24h to kill bacteria. Waste liquid will then be collected in absorbent material and placed into 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 | | |

+ Add another chemical

Statement of work (Process to be undertaken)

These chemicals are part of an ATP assay kit used to determine the amount of ATP present in a sample. The chemicals are combined with distilled water and are safe to store and use for several weeks without impairing results. Prior to use the reagents are combined and then added to bacterial samples in a 96 well plate. The plate is analysed using the plate reader.

Show image

Personal protection requirements not covered in the precaution statements above.

Sources of information and references

MSDS

Reference to **existing approved** Risk Assessment

With the current controls, the risk of using these chemicals is: Low

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: Elizabeth Ratcliffe — Digitally signed by Elizabeth Ratcliffe
Date: 2019.11.20 12:11:54 Z

Form Reference Numbers

| Risk Assessment | Method Statement | COSHH Assessment |
|---|---|---|
| 19MP-ER-0001JD | 19MP-ER-0001JD | 19MP-ER-0001JD |

DSO Signature: Callum Stuart Crane — Digitally signed by Callum Stuart Crane
Date: 2019.11.21 14:47:33 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: 19/11/2020

Review comments