



LOCATION DETAILS

School/Branch: School of Molecular & Biomedical Science

SAFE OPERATING PROCEDURE DETAILS

Date Prepared: 08/12/2010

Review Date: N/A

Version: 1

PREPARED BY: Name, position, & Signature (insert names of supervisor, HSO, subject matter expert)

Tony Richardson – Infrastructure Coordinator
Kate Dixon – Health & Safety Officer
Adrienne Sullivan- Subject matter expert/equipment user

Signature:
Adrienne Sullivan

RISK ASSESSMENT

See risk assessment dated: **03/09/2010**

Risk Rating: **Medium**

RISKS IDENTIFIED

- Short term discomfort
- Possible Hearing Damage
- Exposure to biological agents

SAFETY PRECAUTIONS

The following control measures **MUST** be adhered to:

- **Sound minimising hood (SMH) must be in place when the ultrasonic transducer is activated**
- Personal protective equipment must be worn at all times

PERSONAL PROTECTIVE EQUIPMENT REQUIRED

The following PPE must be worn at all times:

- Gloves, Lab coat, ear protection

SAFE OPERATING PROCEDURE

1. Ensure that you are wearing a lab coat.
2. Put on gloves.
3. Fill Bioruptor waterbath basin with ice/MQ water until the liquid level is just below the indicated line.
4. Place the tubes in the tube holder, making sure to balance (as per a centrifuge), and screw the cog attachment on top (found in the box next to the Bioruptor).
5. Replace the motorised lid on the Bioruptor basin and place the cog in the hole such that the tubes are partially submerged in water.
6. When ready to operate, place the Sound Minimising Hood (SMH) over the transducer bath.
7. Put on ear protection.
8. Turn on the Bioruptor at the power point and turn the dial to number of minutes that sonication is required. **THE BIORUPTOR WILL START IMMEDIATELY.**
9. When finished, turn off the Bioruptor at the power point.
10. Remove the Sound Minimising Hood (SMH).
11. Drain liquid from the basin and clean with ethanol spray/paper towel.

ADMINISTRATION

Note: this Safe Operating Procedure must be reviewed:

- a) after any incident or near miss;
- b) if equipment, substances or processes change;
- c) every 5 years.