Use of Vortex

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# Purpose

<<<< This SOP is left in DOCX format so that you may edit it for your own laboratory and your own make and model of vortex mixer>>>

The purpose of this SOP is to lay out the responsibilities, equipment and procedures required for the use of a laboratory vortex.

# Scope

This SOP applies to all persons prescribing and requiring to use a laboratory vortex.

# Responsibilities

## Supervisors

Supervisors are responsible for:

* **Reviewing this SOP on a regular basis. Review is to consider and mitigate the risks of spill, loss of containment and exposure or other harm. Refer to Performing Risk Assessments SOP.**
* Ensuring the equipment is in good working order.
* Ensuring that all workers under their supervision are trained on and are proficient in performing the steps of this SOP.

## Workers

Workers are responsible for:

* Following this SOP as approved by their supervisor
* Reporting any broken equipment immediately to their supervisor

# Equipment Needed

* Vortex mixer

# Installation

1. Place on a level surface and plug cord into mains supply.
2. Place desired attachment onto the shaft and rotate until the ‘flats’ align.
3. Press the attachment down firmly until it snaps into place.
4. Grasp and pull straight up the installed attachment until it is released from the shaft if another type of attachment needs to be used.
5. Always clean the attachment after use.
6. Always use the appropriate attachment for the vessel.

# Continuous Operation

1. Push switch to the ‘ON’ position.
2. Turn speed control knob to setting No.3 on the dial.
3. Observe that the attachment is immediately set in motion.
4. Place the sample tube on top of the attachment and keep steady.
5. Vary the speed on the dial and/or the angle of contact and pressure against the mixing attachment to achieve the desired mix.
6. Return switch to the ‘OFF’ position once finished.

# Intermittent Operation

1. Push switch to the ‘TOUCH’ position.
2. Turn speed control knob to setting No.3 on the dial.
3. Touch the sample tube with the attachment to observe motion and keep steady.
4. Vary the speed on the dial and/or the angle of contact and pressure against the mixing attachment to achieve the desired mix.
5. Return switch to the ‘OFF’ position once finished.

# Vortexing of Biohazardous Materials

1. Use and appropriate vessel for the sample.
2. Ensure the cap or lid is on tight before vortexing.
3. Grasp the tube with a paper towel, and vortex the tube perpendicularly
4. Wait 2-5 minutes before opening the vessel after vortexing.
5. If risk group 2, open the vessel in a biological safety cabinet, or bring the vortex to the biological safety cabinet.
6. Screw-cap, o-ringed tubes are preferable over snap-cap tubes.

# Training

1. Each lab member is to read, agree and sign off on this SOP.
2. Upon revision or re-write, this SOP is to be re-circulated and re-signed by all lab members.