SOP: CO₂ Incubators

Contacts		
Emergency:		
Dan Voicu	dan.voicu@utoronto.ca	(416)-978-8473
Axel Guenther	guenther@mie.utoronto.ca	(416)-978-1282
<u>Training:</u>		
Victor Sit	victor.sit@utoronto.ca	[TBD]
Dan Voicu	dan.voicu@utoronto.ca	(416)-978-8473

Equipment Overview

The incubators in the Tissue Foundry at CRAFT are set to 5% CO₂, and 37°C. They are for cell culture experiments only.

Notes before use:

- Wear the necessary PPE when operating the incubators.
- Read the MSDS for the materials being used.
- Ensure incubator settings are 5% CO₂ and 37°C. If a setting is off and doesn't correct itself within 5-10 minutes, notify a staff member to look into the issue.
- Ensure samples are labelled with essential details such as the following:
 - i. Name or initials (John Smith, JS)
 - ii. Principal Investigator (Guenther)
 - iii. Sample name (P30-HES2)
 - iv. Date (YYMMDD 220117 or Jan 17/21)

Supplies and Reagents

Provided by CRAFT:

- RTU disinfectant
- 70% Ethanol
- Kimwipe
- PPE (lab coat and safety glasses)





Method

Procedure:

- 1. Ensure the incubator settings are close to 5% CO2 and 37C. If no alarms or red indicator lights appear on the incubator, that means it's working fine.
- 2. Work quickly to remove or put samples into the incubator. Close the door as soon as possible to prevent disruption in the CO₂ level and temperature.

Cleanup:

- 1. If a spill occurs inside the incubator, use Kimwipes to absorb it.
- 2. Dispose the wipe into the yellow biological waste pail.
- 3. Spray a Kimwipes with 70% ethanol and wipe the spilled area.

Troubleshooting:

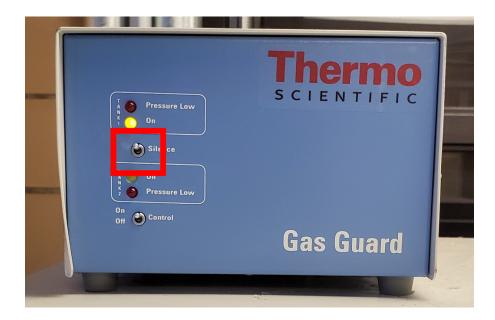
If the CO₂ level suddenly drops and has not corrected itself within 5 minutes, the CO₂ tank may be empty. Check the right meter of the regulator for the tanks (users are trained before given permission to use incubators):







If the PSI value is zero, the CO_2 lines need to be changed by activating the middle switch on CO_2 controller (up or down depending which tank was used) located above the incubators.



Once the CO₂ line has been changed, please close the blue valve on the line from the empty CO2 tank. Please email Victor (victor.sit@utoronto.ca) to replace the empty tank.

