

ProDIEHLene Glycol

Because there is no nicotine in the laboratory and because it is very expensive we decided to study the effect propylene glycol at different concentration

Propylene glycol is one of the most important constituent of electronic cigarette liquid and is considered as a dangerous component.

We will use the t-can to study the growth of the yeasts at different concentrations.

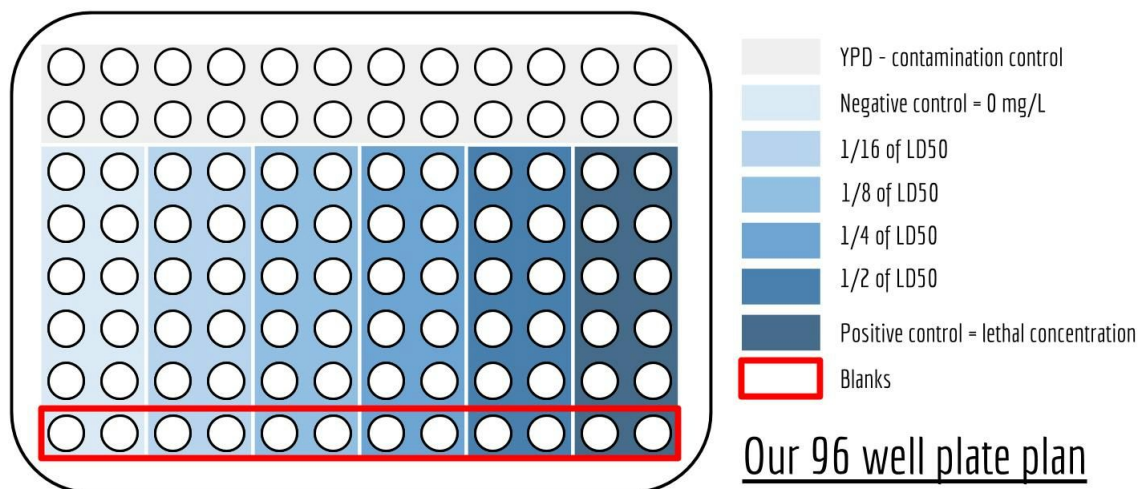
You can see the plate plan below

We did the protocol:

Protocol

We started the protocol and will define tomorrow the concentrations C1,C2,C3,C4,Cpos

- 1) Put 2mL of YPD into two 10ml falcon tube.
- 2) Add the yeast (wild-type strain) into your falcons using a loop
- 3) Put them at the incubator during 12h
- 4) Put 6,6 microliter of each solution in a counting chamber
- 5) With counting chambers we will count the number of yeast in the solution. It allow us to determine the concentration of propylene glycol that we will use.
- 6) Mettre la photo du protocole permettant de trouver la concentration de propylène en fonction du nombre de levures
- 7) Using a 96 well plate with the plate plan below



- 8) Measure the optical density of each well using a Tecan spectrophotometer. Take measure every 30 minutes during 10 hours
- 9)

On the afternoon Loic and Aurélien went to Letmeknow to buy humidity sensor (DHT11 and DHT22)

We tested it

Protocol for the electronic experiment:

- Realize the montage to can use the humidity captor
- We have 4 connections on the humidity captor. In this order, connect the 5V, digital 2, nothing and the ground.
- Make welding
- Copy this code
- Take a falcon and drill the cork four times to pass each connections. On a mis du parafilm et du scotch pour isoler au maximum de l'air l'intérieur du falcon.
- Put the propylene glycol in the falcon.
- Put the humidity captor inside the falcon.
- Close the falcon.
- Measure the humidity during 10min.

BIAIS:

Prendre des mesures toutes les 10 minutes plutôt que toutes les 30 minutes.