

BG - CO₂ Generator

An optimized production of CO₂ over 24 hours with the Biogents formulated yeast powder

CO₂ in Monitoring is Essential However Challenging

When monitoring mosquito populations with traps, the addition of CO_2 is essential in effectively attracting most mosquito species and other blood-sucking insects. However, the access to CO_2 in the form of dry ice or gas cylinders and the logistics behind it often prove to be problematic - especially in remote areas. In some countries it may not even be possible to source dry ice or CO_2 gas cylinders.

An alternative is the production of CO_2 through yeast fermentation. Until now CO_2 production through common yeast strains has been considered unstable. Therefore it was unreliable for 24 hour monitoring.

BG-CO, Generator: Optimized CO, production

- CO, production for 24 hours
- Stable & reliable CO, output
- Cost-effective
- Easy to procure ingredients

- Easy to assemble and use
- Re-usable set
- Thermal control with BG-Pro bag
- BG-CO, Powder as refill

With the BG-CO₂ Generator, Biogents provides an easy-to-use-set for the reliable production of CO₂ over a 24 hour period with yeast fermentation.

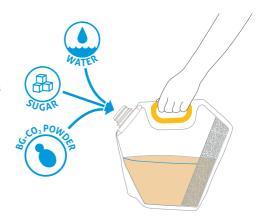
It includes a special $BG-CO_2$ Powder consisting of an optimised mixture of different yeast strains and nutrients, a mixing bag, a thermometer, a spoon, and an insulated bag. The set is re-usable and the $BG-CO_2$ Powder is available as a refill component. The only components you need to add are sugar and warm water.

The insulated BG-Pro carrying bag serves as a container for the mixing bag keeping the temperature stable and therefore the ${\rm CO_2}$ production reliable through thermal control.

Easy to Set-Up

The Biogents mixing bag is included in the set. Just add the following three ingredients and you're all set:

- + Warm water (38 °C)
- + Sugar
- + Biogents BG-CO₂ Powder (20 g)



Place the mixing bag in the insulated carrying bag of the BG-Pro for thermal control.

Biogents' specially formulated BG-CO₂ Powder

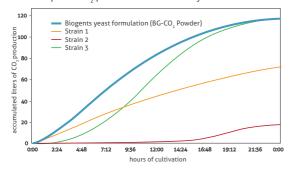
The key element of the $BG-CO_2$ Generator is the $BG-CO_2$ Powder which is an optimized formulation of various yeast strains and nutrients to provide the highest production of CO_2 over a 24 hour period. This optimized mixture was developed by Biogents to be used specifically for mosquito monitoring and the package (200 g) lasts for up to 10 monitoring sessions.

Performance of Biogents' CO, Powder

The CO₂ production of Biogents' optimised yeast powder was tested against other yeast strains over 24 hours.

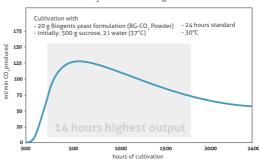
Result: The $\mathrm{BG-CO_2}$ Powder shows the fastest start of $\mathrm{CO_2}$ production and highest output over time in comparison to the other yeast strains.

Compared CO, production of different yeast strains



The CO₂ production of Biogents' yeast powder is optimised for 24 hour monitoring with the highest output over 14 hours.

Release rate of CO₂ over time of Biogents Yeast Formulation



Contents











BG-CO₂ Powder 200 g (also available as a refill)

Mixing bag Lid with tube

Spoon

Thermometer

Insulated bag

Optimal Use With the BG-Pro Trap





The use of the $BG-CO_2$ Generator is optimised for the use with the BG-Pro trap: The insulated carrying bag can serve as a holder for the $BG-CO_2$ Generator mixing bag keeping the temperature stable.









