Gas released from cork after bottling

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Motivation

- Evolution of wine after bottling is affected by the continuous supply of oxygen through the closures.
- Where from comes the main contribution of oxygen after bottling?
- From outside through the cork closure or from the cork itself?
- How much gas is released from inside a cork stopper under typical bottling conditions?
- How fast the gas from a cork stopper is released?
**Experiment**

Pressure in the headspace was monitored for many days at constant temperature

- 3 different starting pressures:
  - 60 mbar (vacuum bottling)
  - 1007 mbar (balanced pressures bottling)
  - 3020 mbar (bottling without prior pumping)

23 ± 0.1 °C (constant temperature)
Results and conclusions

Come to the poster and see!

![Graphs showing air flowrate, air intake, pressure, and loss over time with different starting pressures and headspace volumes.](image-url)