Welcome!

Put it on Nitro!
The Science and Method of Beer Nitrogenation

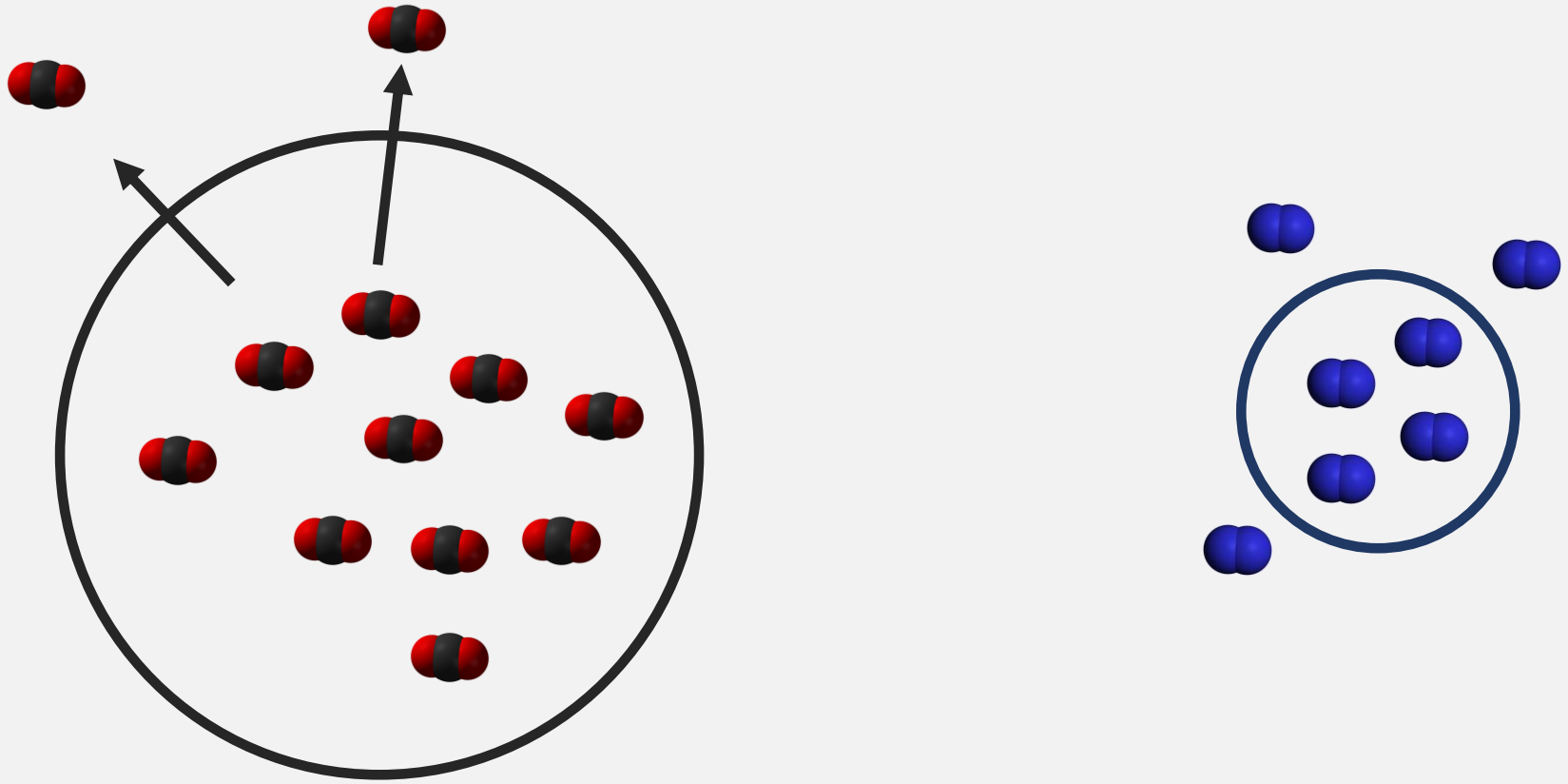
Objectives

- What is Nitro beer?
- Equipment
- Nitrogenation/Carbonation
- Dispense

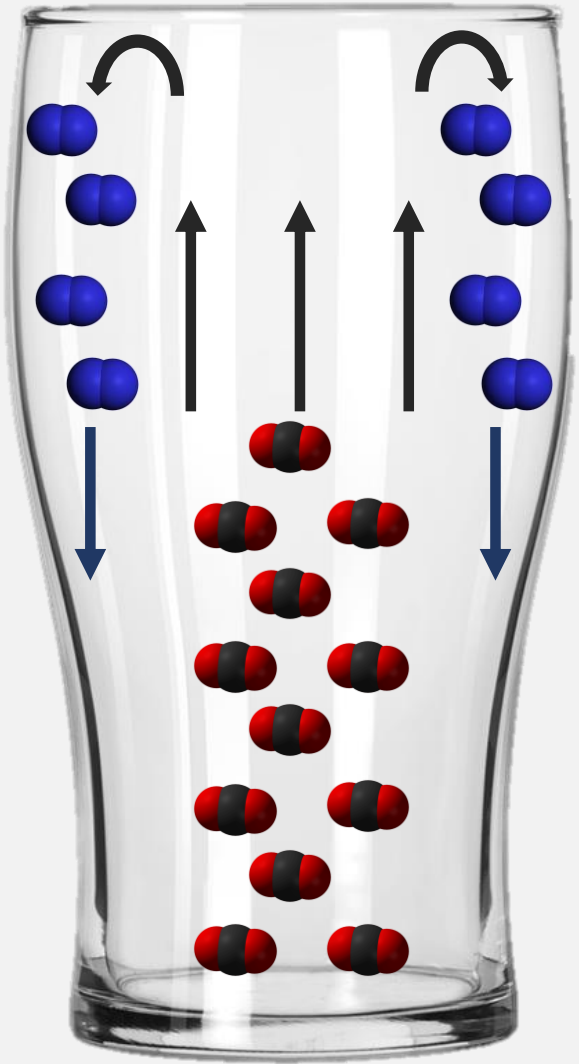
What is Nitro?

- Pushed at ~32psi with 25% Co2/75% N2
- Low carbonation
- Infused with Nitrogen

Dense Foam

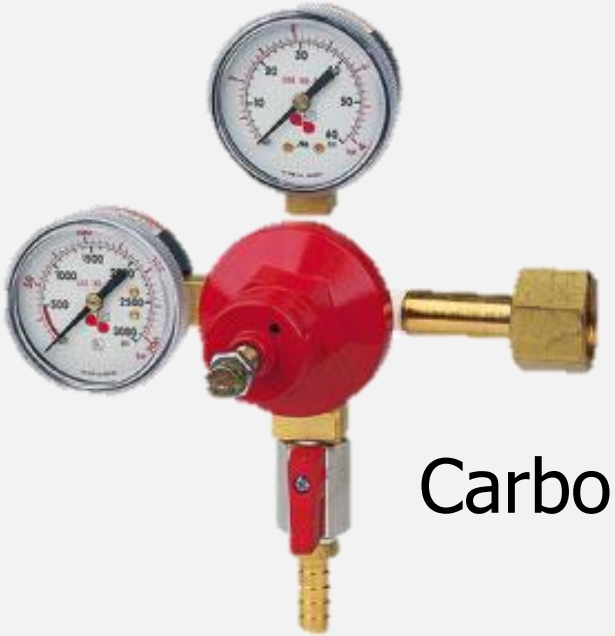


Cascading Effect



Stout Faucet

Gas Tanks and Regulators



Carbon Dioxide

Nitrogen

Diffuser Stones

- Speeds up infusion
- Use stainless clamps
- Beware of backflow

Gas Blenders

Pros

- Consistency
- Easier to source
- Better tank yield

Cons

- $$$
- High pressure tubing and regs
- Requires secondary regulator

Gas Blend Nomenclature

CO2 N2

25% / 75%

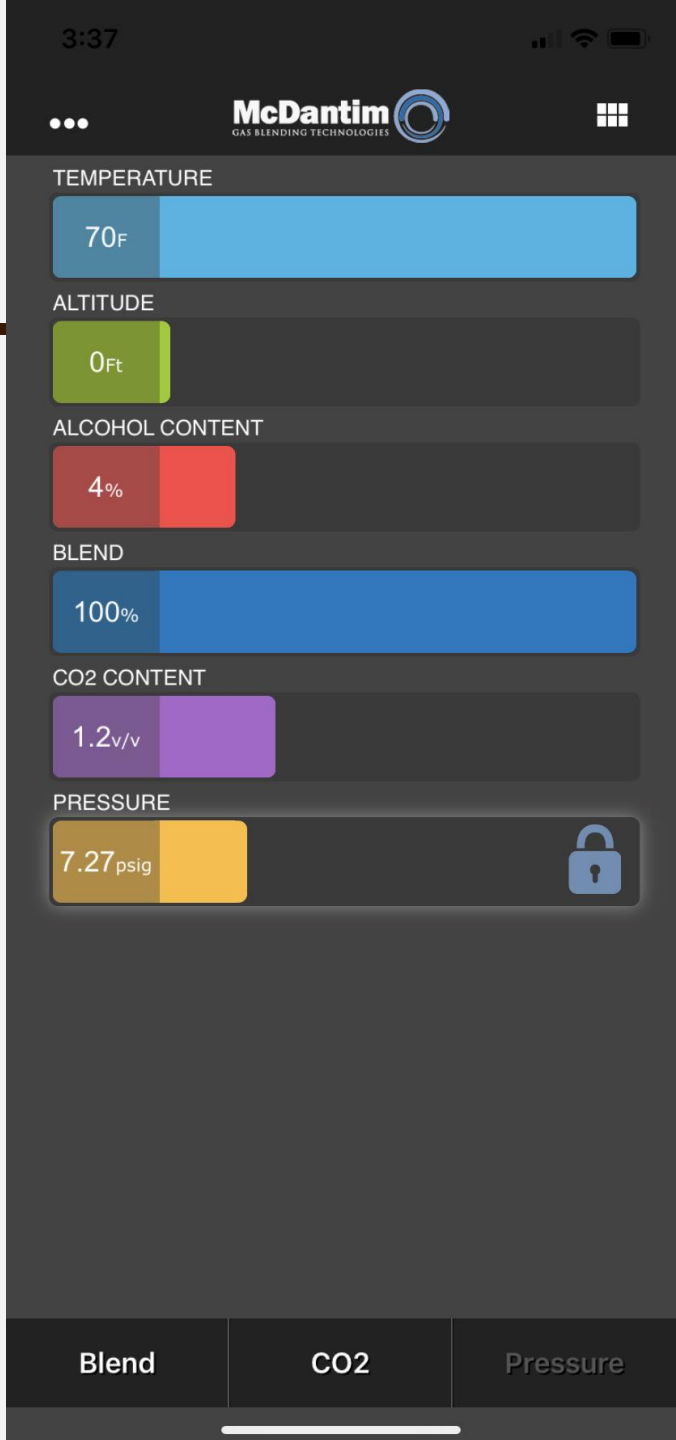
Pure Gases vs Blended Gas

Pro
- Control

Con
- Extra equipment

Carbonation

- Goal = 1.0 - 1.4 v/v CO2
- Too much carbonation creates excess foam
- You cannot use 100% CO2 at serving temperatures
- Increase carbonation temp



Carbonation

- ~~34psi (25/75) ÷ 4 = 8.5psi (100/0)~~
- Convert to absolute pressure!

  34 + 14.7 = 48.7 psia

  48.7 ÷ 4 = 12.175psia

  12.175 – 14.7 = -2.525psi

Nitrogenation

Best practices

- 30^{+} psi N2 partial pressure
- Near freezing temps
- Clarify beer
- Leave ~1 gallon of headspace

100% Nitrogen with Stone

1. Pressurize slowly to 40psi
2. Wait for 10 minutes
3. Bleed slowly to 30psi
4. Repeat 3x

Blended Gas

1. Pressurize to 35-40psi
2. Wait at least 24hrs
3. Slowly bleed to serving pressure

Serving Nitro Beer

- 30-35psi based on temp and v/v CO2
- Restrict normally

Thank you!

Send me your draft questions!

 mikejferrari@gmail.com

  @mikejferrari