

THE TRUTH ABOUT G-MIX - Serve better beer *and* save money!

Reprinted with permission from Garrett Oliver, brewmaster, The Brooklyn Brewery

Over the last decade, many draught systems have begun to employ pre-blended gas, “G-Mix”, to dispense beer. For many, G-Mix was a great improvement over what they had been using - an air compressor (air is one of beer’s worst enemies, and begins to destroy the product immediately on contact, damaging flavor and causing it to go flat. Serving your beer with air is the equivalent of pouring a pint, setting it down, and then drinking it the next day).

G-Mix is composed of 75% nitrogen and 25% carbon dioxide. The selling point for G-mix is that it will not over-carbonate your beer. This is true.

Unfortunately, it’s only half the truth. Instead, G-mix often makes your beer go flat, ruining the quality of your beer, and costing you business and plenty of money.

The “G” in G-mix stands for “Guinness”. Guinness is a beer that is almost flat and needs to be served under very high pressure. The purpose of G-mix is to keep Guinness from becoming over-carbonated or going completely flat under high pressure. The problem is that G-mix has this effect on all beers - they will become as flat as Guinness or flatter.

The reason goes back to the gas mix. When you put on a keg of beer, you want the beer to be pushed to the tap at a good rate and for the beer to remain stable, with the beer becoming neither flatter nor more carbonated. We call this state “equilibrium”, meaning that everything is properly balanced. At 40 degrees, this state can be maintained at about 15 pounds of carbon dioxide (CO₂) pressure.

Here is the slightly confusing part (unless you remember your high school physics, which most of us don’t). **Only CO₂ can hold CO₂ in your beer and keep it from going flat.**

Nitrogen can help push your beer to the tap, but it *can’t hold CO₂ in your beer*. Since G-mix is 75% nitrogen and 25% CO₂, when you apply 20 pounds of G-mix pressure, you’re actually applying 15 pounds of nitrogen pressure and *only five pounds of CO₂ pressure*. The beer “acts” as if the nitrogen isn’t there at all.

And since it’s only under five pounds of CO₂ pressure, it slowly goes flat (to get 15 pounds of CO₂ pressure from G-mix, you would need to apply 60 pounds of pressure, which would burst your keg). The beer doesn’t taste as good, you sell less of it, and may often toss out the end of the keg, which should have been good to the last drop.

So what do you do?

If all your draught lines are high-volume and you go through each keg in a day or two, you probably have no problems - your beer doesn’t have time to go flat.

Otherwise, if you can get your beer to the tap with 16 pounds or less of pressure, you can use straight CO₂ without any problems. It will keep your beer in perfect shape, and it costs less than G-mix.

If you have a long run to the tap, and need higher pressure on your lines, then you might seriously consider getting a gas blender unit. This allows you to customize your nitrogen/CO₂ gas mix to obtain a perfect pour every time (of regular beer and Guinness), regardless of the pressure.

- Garrett Oliver
Brewmaster, Brooklyn Brewery