





Sunshine and Mango Sour

What You Get

- 1 Golden Ale Brewing Extract (HME)
- 1 Packet of Golden LME
- 1 Packet of Honey Malt
- 1 Bottle of Lactose Sugar
- 1 Bottle of Lactic Acid (you will add this right before you bottle your beer)
- 1 Muslin Hop Sack
- 1 Packet of S-04 Yeast
- 1 Packet of No-Rinse Cleanser

You Provide

1 Can of Jumex Mango Nectar (you can find this at most grocery stores)

STEP 1: Sanitizing

Cleaning is one of the most important steps in brewing. It kills microscopic bacteria, wild yeast, and molds that may cause off-flavors in your beer. Make certain to clean all equipment that comes in contact with your beer by following the directions below:

- 1. Fill clean keg with warm water to line mark 1 on the back, then add ½ pack (about 1 tablespoon) of No-Rinse Cleanser and stir until dissolved. Once dissolved, the solution is ready to use. Save the remaining ½ of No-Rinse Cleanser because you will need it for bottling.
- 2. Screw-on the lid and swirl the keg so that the cleaning solution makes contact with the entire interior of the keg, including the underside of the lid. Note that the ventilation notches under the lid may leak solution. Allow to sit for at least 2 minutes and swirl again.
- 3. To clean the spigot, open it fully and allow the liquid to flow for 5 seconds and then close.







- 4. Pour the rest of the solution from the keg into a large bowl. Place your spoon/whisk, can opener and measuring cup into the bowl to keep them cleaned throughout the brewing process. Leave them immersed for at least 2 minutes in cleaning solution prior to using.
- 5. After all, surfaces have been thoroughly cleaned, do not rinse or dry the keg or utensils. Return lid to the top of the keg, proceed immediately to brewing.

STEP 2: BREWING

Brewing beer is the process of combining a starch source (in this case, a malt brewing extract) with yeast. Once combined, the yeast eats the sugars in the malt, producing alcohol and carbon dioxide (CO2). This process is called fermentation.

- 1. Remove the yeast packet from under the lid of the can of Brewing Extract, (not needed for this recipe) then place the unopened can and LME in hot tap water.
- 2. Add the packet of grain to your muslin sack, tie the sack closed so that the grain can float freely within it, and trim away the excess material.
- 3. Add 8 cups of water to a 1 gallon or larger pot. Bring the temperature of this water up to 155-160 degrees. Add your sack of grains to this water and hold the temperature between 155-160, for 30 minutes.
- 4. Once 30 minutes have passed, remove the grain bag from your pot and rinse the grain bag with one cup of hot water, allowing the run-off to drain into the pot, do not squeeze the bag. Discard grains.
- 5. Bring your grain water to a boil. Add the bottle of Lactose Sugar to your boiling grain water and stir gently until dissolved. Then remove the pot from the heat.
- 6. Open the can of Brewing Extract and LME and pour the contents into the hot mixture in your pot. Stir until thoroughly mixed. This mixture of unfermented beer is called wort.
- 7. Fill your fermenter with cold tap water to the mark 1 on the back. If using any other fermenter this would be approximately 1 gallon of water.
- 8. Pour the wort into your fermenter, and then bring the volume of the fermenter to mark 2 by adding more cold water. (If you have a different fermenter top it off with
- 9. Stir your wort mixture vigorously with your sanitized spoon or whisk.
- 10. Sprinkle the S-04 Dry Ale yeast packet into the keg, and screw on the lid. Do not stir.







Put your fermenter in a location with a consistent temperature between 68° and 78° F (20°-25° C), and out of direct sunlight. Ferment for 14 days.

STEP 4: Adding Extras

Adding extras is the process of adding additional ingredients to a beer which will impart more flavor and aroma in your finished brew.

1. On day 7 of fermentation open, the room temperature can of Jumex mango nectar and carefully pour it into your fermenter, replace the lid, and allow it to continue fermenting.

STEP 5: Bottling & Carbonating

After 14 days, taste a small sample to determine if the beer is fully fermented and ready to bottle. If it tastes like flat beer, it is ready. If it's sweet, then it's not ready. Let it ferment for 3 more days (17 total). At this point, it is time to bottle. *Do not let it sit in the fermenter for longer than 24 days total*.

BEFORE YOU BOTTLE YOUR BEER ADD YOUR BOTTLE OF LACTIC ACID TO YOUR FERMENTER.

- 1. When your beer is ready to bottle, fill a 1-gallon container with warm water, then add the remaining ½ pack of the No-Rinse Cleanser and stir until dissolved. Once dissolved, it is ready to use.
- 2. Distribute the cleaning solution equally among the bottles. Screw-on caps (or cover with a metal cap if using glass bottles) and shake bottles vigorously. Allow to sit 10 minutes, then shake the bottles again. Remove caps and empty all cleaning solution into a large bowl. Use this solution to clean any other equipment you may be used for bottling. Do not rinse.
- 3. Add 2 <u>Carbonation Drops</u> to each 740-mL bottle. For 1-liter bottles, add 2 ½ drops; for ½-liter bottles add 1 drop. Alternatively, you can add table sugar using <u>this table as a guide</u>.
- 4. Holding the bottle at an angle, fill each bottle to about 2 inches from the bottle's top.
- 5. Place caps on bottles, hand tighten, and gently turn the bottle over to check the bottle's seal. It is not necessary to shake them.
- 6. Store the bottles upright and out of direct sunlight in a location with a consistent temperature between 70°-76°F or 21°-24°C. Allow sitting for a minimum of 14 days. If the temperature is cooler than suggested it may take an additional week to reach full carbonation.





Tip from our Brewmasters

After the primary carbonation has taken place your beer is ready to drink. We recommend putting 1 bottle in the refrigerator at first for 48 hrs. After 48hrs. give it a try and if it is up to your liking put the rest of your beer in the fridge. If it does not taste quite right, leave the bottles out at room temp for another week or so. Keep following this method until your brew tastes just how you like it.

This process is called conditioning and during this time the yeast left in your beer can help clean up any off-flavors. Almost everything gets a little better with time and so will your beer.