

# How TO Make A Sour Mash Beer

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# What is a Sour Mash Beer?

- A Sour Mash beer is a good way to get started making sours at home without worrying about cross-contamination.
- Sour Mash Beers are fermented with regular brewers yeast and therefore do not use any bacteria.
- Sour mash beers only ferment as long as a regular ale/lager.
- The method outlined in this presentation is the use of a Sour Starter, based on a Zymurgy article entitled: Funk With Less Fuss.

# Equipment Needed:

- **25 watt Top Fin Submersible Aquarium Heater for up to 5 gallons. (make sure its the version with an adjustable knob for temperature control)**
- **7 gallon or larger Insulated cooler**
- **Pint sized or larger Mason Jar w/ Lid**





# Making the Sour Starter

## Sour Starter for 5 gallons:

- Make 3 days prior to brew day
- In a pint mason jar or larger add 1 pint of wort @ around 1.030 sg. To this add 3 tbs whole malted barley. Mix together & cover loosely by screwing the lid on the mason jar just enough to catch the threads
- Store jar @ around 100f for 3 days.
  - This is done by placing the aquarium heater in a container large enough to completely cover it and hold the mason jar full of wort. The mason jar will be sitting in a bath of water so that the starter maintains a temperature of at least 90 degrees Fahrenheit . (I had to place an object on the bottom of my container holding the water to have the mason jar not completely submerged in the water bath, but still cover the heater) Make sure the water heater is completely covered, if the heater is not completely covered with liquid it can overheat and break.

# What Happens in the Sour Starter?

- Barley has a naturally occurring lactic bacteria that lives on the husks.
- By maintaining a temperature above 90 and holding for 3 days the Ph in the wort drops so low that all other bacteria present on barley die (entobacter & acetobacter) leaving only the Lactic producing bacteria.
- After 3 days the sour starter usually has a powdery/milky pellicle and smells distinctly of sour green apples. If it smells like anything else is most likely infected, and is a result of sanitation techniques.





# **I have the Sour Starter Now What?**

- Now that you have a good sour starter you simply brew as you would normally but do not start to boil the wort.
- You will collect all of the runnings from the mash tun and then cool the wort to roughly 115 degrees.
- Once all the runnings have been collected and cooled place the wort inside the Insulated cooler. Sanitize the aquarium heater and place inside the cooler with the wort so that the temperature stays above 90.
- Let Sour for 18-24 hours depending on the amount of sourness wanted.
- Now you will pick up where you left off and boil the wort,, add hops and pitch your selected yeast. (yes, this does turn your brewing into a 2 day session but you only do half each day)



# Why Is Cross-Contamination Not An issue?

- Because the wort is soured first and then boiled all of the lactic bacteria are killed during the boil.

## What Can I Expect Flavor Wise?

- Sour mash beers will lack some of the depth a true sour beer has since they dont utilize Brettanomyces or pedicocus bacteria but they can certainly provide a nice sour beer.
- Using wood in the fermenter helps as well considering most sour beers are fermented in barrels.