

## Tan Extra Special Bitter: Your Brewmaking Companion

### Your Kit includes:

- 1 Gallon Fermentation Jug
- Drilled Rubber Stopper
- Airlock
- Racking Cane
- Tubing (and Hard Tubing for Blow-off Assembly)
- Tube Clamp
- Thermometer
- Sanitizer Packet
- Grain, Hops, Yeast for a 1 Batch (Note: store hops and yeast in the fridge.)

### What else you need:

- Stock Pot
- 12 Empty Swing-top Bottles (ie: Grolsch)
- Strainer
- Funnel
- Honey
- Ice

### Step 1: Sanitize. Sanitize. Sanitize.

- You might be surprised to learn that Step 1: Sanitization might actually be the most important thing here. If things are not completely clean, your yeast will die. You will not drink good beer, and the next few steps will only provide you with a valuable learning experience instead of a decidedly more valuable drinking experience.
- Therefore, mix half of your C-Brite sanitizer packets with half a gallon of water in a container.
- Pour some in a spray bottle. It's completely safe and evaporates when diluted, so spray your counters. Spray everything. Spray often. Anything touching beer or hands, spray. If unsure, spray.
- Keep the rest in a container for now. Don't use all of it yet.

### Step 2: The Mash

- Heat 1 & 1/2 quarts of water to 160°F (71°C)
- Add grain (This is called "mashing in." Take note of jargon. Or don't.)
- Mix gently with sanitized spoon or spatula until mash has consistency of oatmeal.

### Step 2: The Mash (continued.)

- Temperature will drop to ~150°F (66°C)
- Cook for 60 minutes at 144-152°F (63-68°C). Stir every 10 minutes, and use your thermometer to take temperature readings from multiple locations in the grain.
- You probably don't need to apply heat constantly. Try getting it up to temperature, then put a lid on it.
- Monitor, stir, and adjust accordingly to keep in range.
- After 60 minutes, heat to 170°F (77°C) while stirring constantly ("Mashing Out").

### Step 3: The Sparge

- Heat 1 gallon of water to 170°F (77°C).
- Set up your "lauter tun" (a strainer over a pot.)
- Carefully add the hot grain mash to the strainer, collecting the liquid that passes through.
- This liquid is called "wort" (pronounced "wert"). It will be your beer.
- Slowly and evenly pour 170°F (77°C) water over the mash to extract the grain's sugars.
- Collect a total of 1.2 gallons (1 gallon and 3/4 quarts) of wort from the grain.
- Discard the remaining unused hot water.
- Re-circulate wort through grain once.

### Step 4: The Boil

- In a pot, heat wort until it boils.
- Keep boiling until you've hit the "hot break" (Wort will foam - you may need to reduce heat slightly so it doesn't boil over.)
- Stir throughout the boil. All you want is a light boil – too hot and you lose fermentable sugars.
- The boil will last 60 minutes - start your timer and add in the rest of the ingredients at these times:
  - Add Challenger hops at the start of boil.
  - 30 minutes into the boil add 1/2 the WGV hops.
  - 55 minutes into the boil add remaining WGV hops.
  - Turn off heat.
- Twenty percent of the wort will have evaporated in this step leaving you with 1 gallon of wort.

## Step 5: Fermentation

- Place brew pot in an ice bath until it cools to 70°F (21°C)
- Remove brew pot from ice bath.
- Strain cooled wort through funnel into glass jug.
  - Yeast needs oxygen, and this helps aerate your wort and clarify your beer.
- “Pitch” yeast. (Toss it in.)
  - No need to make a starter - it’s the right size for 1 gallon.
- Shake aggressively.
  - You’re basically waking up the yeast and getting more air into the wort.
- Firmly insert sanitized stopper into bottle.
- Attach rubber tubing to short, hard plastic tube protruding from the stopper. (It comes attached in the kit, separate them to clean then reattach.)
- Place other end of rubber tubing into a bowl of sanitizer solution. (Bowl must be lower than jug.)
- You’ve just made a “blow-off tube”. It makes sure your beer doesn’t blow up because of the gas from the yeast eating sugars and producing alcohol.
- Let sit for two or three days or until bubbles subside.
- Remove blow-off tube and short, hard plastic tube sticking out of stopper.
- Assemble airlock, filling up to line with sanitizer.
- Firmly insert airlock into hole in stopper.
- Keep in a cool dark place for two weeks without disturbing other than to show off to friends. (If beer is still bubbling, leave sitting until it stops.)
- In the meantime drink beer with self-closing swing tops (or non-twist off if you have the capper) , or go to a bar that has some and ask for empties.

## Step 6: Bottling

- Thoroughly rinse bottles with water, removing any sediment.
- Mix remaining sanitizer with water.
- Fill each bottle with a little sanitizer and shake. Empty and dry upside down. (It’s fine if there are still a few bubbles from sanitizer by the time you bottle.)
- Attach sanitized tubing to the end of your sanitized “racking cane” (hard plastic tube with small bend at its end.)
- It will probably be a snug fit, but you can get it on there.
- Fill a sanitized pot with 1/4 cup of honey.

## Step 6: Bottling (continued.)

- Siphoning (It all happens pretty fast. You may want to practice on a pot of water first.)
  - Fill tubing, but not racking cane, with sanitizer.
  - Hold tubing below top of racking cane so sanitizer doesn’t pour into your beer.
  - Remove stopper and place racking cane into jug, just above the yeast and sediment at the bottom (“trub”).
  - Lower end of tubing not connected to racking cane into sink so that sanitizer flows out.
  - Suction will force beer up and through the racking cane and tubing.
  - Let sanitizer flow into sink until beer just starts to flow out of the tubing, then clamp shut.
  - Open clamp on tubing, allowing beer to flow into pot with honey.
  - Tilt jug when beer level is getting low, but be careful in not sucking up the trub.
  - Siphon beer from pot into bottles, pinching tube clamp to stop flow after each bottle.
- Close swing-tops bottles.
- Store in a cool dark place for 2 weeks.

## Step 7: Enjoying

- Drink. Share with friends if you’re the sharing type.

## Step 8: Plan Your Next Brew

- Visit Brooklyn Brew Shop at the Brooklyn Flea or online at [www.brooklynbrewshop.com](http://www.brooklynbrewshop.com)  
New brews will be added regularly.  
Happy brewing and drinking!

- Erica & Stephen

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