



# **STRONG BITTER**

**Style: Extra Special Bitter (ESB)**

Batch Size: 5 Gal  
OG: 1.054-1.056  
FG: 1.015-1.017  
IBU: 41  
SRM: 9  
ABV: 5.2%

Recipe CK00054

## **GRAINS**

11 lb. 2-Row Brewer's Malt  
8 oz. Caramel 20L  
4 oz. Caramel 120L

## **EXTRACTS/ADJUNCTS**

1 Whirlfloc Tablet (15 min.)

## **HOPS/SPICES**

1.75 oz. Kent Goldings (60 min.)

1 oz. Kent Goldings (1 min.)

**YEAST: 1<sup>st</sup> choice** – WLP002 English Ale Yeast

**2<sup>nd</sup> choice** – WLP007 Dry English Ale Yeast

## **All Grain Brewing Instructions**

1. Gather mash water (between 1 and 1.5 quarts for each pound of grain).
2. Preheat mash water to appropriate temperature. Usually 10° - 15° above target temp of 155° . A mash temp calculator is recommended to determine optimal temperature.
3. Dough in grains, stirring thoroughly to avoid dough balls, and steep the grains for 60 minutes. Maintaining this temp will ensure best efficiency.
4. In another vessel, prepare your sparge water (roughly half of your desired boil volume). Heat this to 168° .
5. Collect your mash and sparge water in your kettle. Depending on your sparge method, your process will vary.
6. Once you have collected all of your wort, bring the kettle to a boil.
7. Lower heat and add first addition hops. Start your boil timer and raise the heat to a rolling boil. At this point you must not leave the kettle unattended – if a boil over begins, turn down the heat.
8. Continue to add remaining ingredients as necessary. Please Note - times are based on remaining boil duration – example: (15 mins.) means add the ingredient when 15 minutes remain on the timer.
9. When boil is complete, turn off heat.
10. Cool the wort to 75 degrees.
11. Transfer to sanitized fermenter.
12. Aerate thoroughly, and then pitch the yeast.