

BS025 Battle - English IPA

English IPA (12 C)

Type: All Grain
Batch Size: 40.00 l
Boil Size: 53.68 l
Boil Time: 120 min
End of Boil Vol: 43.68 l
Final Bottling Vol: 39.00 l
Fermentation: Ale, Two Stage

Date: 17 Jan 2016
Brewer: Charles Tucker
Asst Brewer:
Equipment: My Braumeister 50L
Efficiency: 74.00 %
Est Mash Efficiency: 77.7 %
Taste Rating: 30.0



Taste Notes: Tasted when bottles 08/02/16. Brilliant clarity. Good malty balance. Hops not overpowering. Hop character is slightly lacking.

Tasted first bottle 06/03/16. Nice dryness, with wheat evident. Good malt forward, hops rather subtle. I wonder if too much gelatine has taken some hop flavour out?

Prepare for Brewing

- Clean and Prepare Brewing Equipment
- Total Water Needed: 61.18 l
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Water Prep

Amt	Name	Type	#	%/IBU
62.00 l	RO Water	Water	1	-
21.70 g	Gypsum (Calcium Sulfate) (Mash 60.0 mins)	Water Agent	2	-
12.40 g	Epsom Salt (MgSO4) (Mash 60.0 mins)	Water Agent	3	-
4.34 g	Calcium Chloride (Mash 60.0 mins)	Water Agent	4	-

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU
10.25 kg	Pale Malt, Maris Otter (Warminster Maltings) (4.5 EBC)	Grain	5	84.0 %
0.40 kg	Crystal Malt Low Colour - 100L (BrewUK) (100.0 EBC)	Grain	6	3.3 %
0.40 kg	Victory Malt - Briess (Brew UK) (53.0 EBC)	Grain	7	3.3 %
0.40 kg	Wheat Malt Pale Crushed (Brew UK) (3.0 EBC)	Grain	8	3.3 %
40.00 l	RO Water (Kingfisher Aquarium) (Mash 0.0 mins)	Other	9	-

Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 61.18 l of water at 71.2 C	66.0 C	60 min
Mash Step	Add 0.00 l of water and heat to 70.0 C over 5 min	70.0 C	15 min
Mash Out	Add 0.00 l of water and heat to 76.0 C over 7 min	76.0 C	15 min

- If steeping, remove grains, and prepare to boil wort
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First Wort Hops

Amt	Name	Type	#	%/IBU
100.00 g	East Kent Goldings (Brew UK) [5.02 %] - First Wort 120.0 min	Hop	10	32.4 IBUs

- Add water to achieve boil volume of 53.68 l
- Estimated pre-boil gravity is 1.052 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU
50.00 g	Target (Brew UK) [11.61 %] - Boil 70.0 min	Hop	11	32.2 IBUs
0.50 Items	Protofloc Tablet (Boil 15.0 mins)	Fining	12	-

Steeped Hops

Amt	Name	Type	#	%/IBU
50.00 g	Fuggles (Brew UK) [5.19 %] - Steep/Whirlpool 0.0 min	Hop	13	0.0 IBUs

- Estimated Post Boil Vol: 43.68 l and Est Post Boil Gravity: 1.074 SG

Cool and Transfer Wort

- Cool wort to fermentation temperature
- Transfer wort to fermenter
- Add water if needed to achieve final volume of 40.00 l

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU
2.0 pkg	London Ale Yeast (Wyeast Labs #1028) [124.21 ml]	Yeast	14	-
0.75 kg	Cane Sugar Unrefined (Billington's) (3.9 EBC)	Sugar	15	6.1 %

- Measure Actual Original Gravity _____ (Target: 1.074 SG)
- Measure Actual Batch Volume _____ (Target: 40.00 l)
- Add water if needed to achieve final volume of 40.00 l

Fermentation

- 17 Jan 2016 - Primary Fermentation (4.00 days at 20.0 C ending at 20.0 C)
- 21 Jan 2016 - Secondary Fermentation (10.00 days at 20.0 C ending at 20.0 C)

Secondary Ingredients

Amt	Name	Type	#	%/IBU
1.06 g	Gelatin (Brupaks) (Secondary 5.0 hours)	Fining	17	-

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU
50.00 g	Fuggles (Brew UK) [5.19 %] - Dry Hop 7.0 Days	Hop	16	0.0 IBUs

- Measure Final Gravity: _____ (Estimate: 1.013 SG)
- Date Bottled/Kegged: 31 Jan 2016 - Carbonation: Bottle with 229.40 g Corn Sugar
- Age beer for 30.00 days at 18.3 C
- 01 Mar 2016 - Drink and enjoy!

Notes

All brewing liquor 5.5 pH. Mash 5.3-5.4
Crystal malt added at vorlauf (turn off BM and lift top filters and add to mash before starting mash out).

pH before grain 6.23. After grain and at mash start 5.46.

Post mash pH 5.63.

4L of water added to achieve boil volume.

Dry hopped with 50g Fuggles 26/01/16.

Tasted 01/02/16. Bit raw in flavour and hoppiness not over powering. SG 1.012.

Cold crash

Let beer sit at cold-crash temps for a day or so

Add gelatin solution

Rack off to conditioning vessel (or bottling bucket)

Let sit a few days to a week more under airlock

Transfer to bottling bucket, add priming sugar, bottle like normal, or keg.

Racked into conditioning vessel 03/02/16. Brix 8.5 (1.009). 5 tspns gelatin dissolved in 200ml warm water and gently stirred in. pH 4.55.

Bottled and kegged 08/02/16. 19L in Corny, 19.5L bottled (39 bottles).