# **BS025 Battle - English IPA**

English IPA (12 C)

Type: All Grain

Batch Size: 40.00 I

Brewer: Charles Tucker

Boil Size: 53.68 | Asst Brewer:

Boil Time: 120 min Equipment: My Braumeister 50L

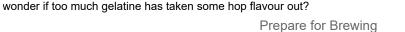
End of Boil Vol: 43.68 | Efficiency: 74.00 %

Final Bottling Vol: 39.00 | Est Mash Efficiency: 77.7 % Fermentation: Ale, Two Stage Taste Rating: 30.0

Taste Notes: Tasted when bottles 08/02/16. Brilliant clarity. Good malty balance. Hops not overpowering.

Hop chracter is slightly lacking.

Tasted first bottle 06/03/16. Nice drynesss, with wheat evident. Good malt forward, hops rather subtle. I



○ Clean and Prepare Brewing Equipme	nt
O Total Water Needed: 61.18 I	

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### Water Prep

Amt	Name	Type	#	%/IBU
62.00 I	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 I of water at 71.2 C	66.0 C	60 min
Mash Step	Add 0.00 I of water and heat to 70.0 C over 5 min	70.0 C	15 min
Mash Out	Add 0.00 I of water and heat to 76.0 C over 7 min	76.0 C	15 min

O 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	Нор	10	32.4 IBUs

Add water to achieve boil volume of 53.68 I

Estimated pre-boil gravity is 1.052 SG

## **Boil Ingredients**

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

## Steeped Hops

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

O Estimated Post Boil Vol: 43.68 I and Est Post Boil Gravity: 1.074 SG

Cool and Transfer Wort

<ul> <li>Cool wort to fermentation temperature</li> </ul>	$\circ$	Cool	wort t	to feri	mentatior	n temp	erature
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Transfer wort to fermenter

O Add water if needed to achieve final volume of 40.00 I

Pitch Yeast and Measure Gravity and Volume

# Fermentation Ingredients

	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 %
<ul><li>Measure Actual</li></ul>	Original Gravity (Target: 1.074 SG) Batch Volume (Target: 40.00 I) ded to achieve final volume of 40.00 I		
	Fermentation		
	rimary Fermentation (4.00 days at 20.0 C ending at 20.0 C) econdary 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	Нор	16 0.0 IBUs
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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 bottlling 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).