TETB Best Bitter Experimer

Best Bitter (11 B)

Type: All Grain Batch Size: 21.00 L **Boil Size: 23.77** L Boil Time: 60 min End of Boil Vol: 21.88 L Final Bottling Vol: 19.00 L

Fermentation: Ale, Single Stage

Date: 22 Oct 2021 **Brewer:** TETB Asst Brewer:

Equipment: TETB 19L **Efficiency:** 88.00 %

Est Mash Efficiency: 88.0 %

Taste Rating: 30.0



Taste Notes:

Prepare for Brewing

O No yeast starter u	sed
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- OClean and Prepare Brewing Equipment
- O Total Water Needed: 27.06 L
- Mash Water Acid: None

Mash or Steep Grains

Mash Ingredients

Amt	Name	Туре	#	%/IBU	Volume
3.00 kg	No19 Floor Malted Maris Otter Malt (Crisp) (6	Grain	1	91.2 %	1.96 L
0.15 kg	Crystal, Medium (Simpsons) (178.5 EBC)	Grain	2	4.6 %	0.10 L
0.12 kg	Biscuit (Dingemans) (44.3 EBC)	Grain	3	3.6 %	0.08 L
0.02 kg	Black Malt (Simpsons) (1666.5 EBC)	Grain	4	0.6 %	0.01 L

Mash Steps

Name	Decerintion	Step Temperature	Step Time
Beta Glucanase	Add 11.63 L of water and heat to 45.0 C over 0	45.0 C	20 min
Beta Amylase	Heat to 63.0 C over 10 min	63.0 C	45 min
Alpha Amylase	Heat to 70.0 C over 10 min	70.0 C	20 min
Mash Out	Heat to 76.0 C over 10 min	76.0 C	5 min

	Sparge	Water	Acid.	None
\ /	SDarge	water	ACIU.	INOHE

- OFly sparge with 15.44 L water at 75.6 C
- Add water to achieve boil volume of 23.77 L
- Estimated pre-boil gravity is 1.038 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
15.00 g	Whitbread Golding Variety (WGV) [5.65 %]	Нор	5	10.3 IBUs	-
30.00 g	Whitbread Golding Variety (WGV) [5.65 %]	Нор	6	15.9 IBUs	-
0.28 tsp	Irish Moss (Boil 10.0 mins)	Fining	7	-	-
40.00 g	Whitbread Golding Variety (WGV) [5.65 %]	Нор	8	0.0 IBUs	-

	○ Estimated Post Boil Vol: 21.88 L and Est Post Boil Gravity	y: 1.043 S	G		
	Cool and Transfer Wort				
	Cool wort to fermentation temperature Transfer wort to fermenter				
	Add water if needed to achieve final volume of 21.00 L				
	Pitch Yeast and Measure Gravity ar	nd Volur	me		
	Fermentation Ingredients				
Amt	Name	Туре	#	%/IBU	Volume
1.0 pl	kg German Bock (Omega #OYL-111)	Yeast	9	-	-
	Measure Actual Original Gravity (Target: 1.04 Measure Actual Batch Volume (Target: 21.00 I Fermentation 22 Oct 2021 - Primary Fermentation (14.00 days at 19.4 C Dry Hop and Bottle/Keg Measure Final Gravity: (Estimate: 1.012 SG) Date Bottled/Kegged: 05 Nov 2021 - Carbonation: Keg wi Age beer for 30.00 days at 18.3 C 05 Dec 2021 - Drink and enjoy!	ending a		C)	
	Notes				
FOR 1	50 Sulphate / 100 Chloride (let's try less minerality for a change)	re)			
MASH 5.82 lit top up 4.7ml (1/4 Ca 0.7g G 0.8g C	I tres RO to 11.63 litres CRS mden tablet				
top up 7.3ml	tres RO to 15.44 litres				

0.9g gypsum
1.1g calcium chloride
2.3g Epsom salts

- * Mashed in with the water at about 60°c and the mash was running very slowly for the first 15mins or so. Lesson: do the 45°c rest even if you have no wheat in there.
- * Pre-boil was 24L at 1.032 (estimate, so I gave it a good hard boil.
- * Forgot the third hop addition until about 2/3rds through the run-off; so I quickly dumped them in and topped up the kettle with a couple of litres of boiling RO.
- * Post-boil was 21 L at 1.044 (estimate 21 L at 1.042).
- * Smack-pack hadn't swelled so I pitched the slurry from the Vienna (OLY-111, German bock)