Belgian Pale Ale

Belgian Pale Ale (24 B)

Type: Partial Mash
Batch Size: 22.00 l
Boil Size: 13.71 l
Boil Time: 90 min
End of Boil Vol: 11.46 l
Final Bottling Vol: 20.50 l
Fermentation: Ale, Two Stage

Date: 15 Sep 2016
Brewer: Chris
Asst Brewer:
Equipment: Chris Equipment
Efficiency: 60.00 %
Est Mash Efficiency: 62.7 %
Taste Rating: 30.0

Taste Notes: yeast options
Wyeast Ardennes
Wyeast PC Belgian Schelde
Mangrove Jacks - M27 - dry yeast
WLP500 / WLP530

Ingredients

Amt	Name	Type	#	%/IBU
3.00 kg	Pilsner (2 Row) Bel (3.5 EBC)	Grain	1	57.2 %
1.00 kg	Vienna Malt (5.5 EBC)	Grain	2	19.1 %
0.12 kg	Biscuit Malt (50.0 EBC)	Grain	3	2.4 %
0.12 kg	Aromatic Malt (100.0 EBC)	Grain	4	2.3 %
1.00 kg	Light Dry Extract (15.8 EBC)	Dry Extract	5	19.1 %
30.00 g	East Kent Goldings (EKG) [4.60 %…	Hop	6	10.9 IBUs
30.00 g	Styrian Goldings [2.10 %] - Boil 60…	Hop	7	5.0 IBUs
10.00 g	Magnum [12.00 %] - Boil 60.0 min	Hop	8	9.5 IBUs
20.00 g	Styrian Goldings [2.10 %] - Boil 20…	Hop	9	2.0 IBUs
1.0 pkg	Belgian Ale (White Labs #WLP550…	Yeast	10	-

Gravity, Alcohol Content and Color

Est Original Gravity: 1.052 SG
Est Final Gravity: 1.010 SG
Estimated Alcohol by Vol: 5.5 %
Bitterness: 27.4 IBUs
Est Color: 13.5 EBC

Measured Original Gravity: 1.052 SG
Measured Final Gravity: 1.016 SG
Actual Alcohol by Vol: 4.7 %
Calories: 492.9 kcal/l

Mash Profile

Mash Name: Temperature Mash, 2 Step, Medium Body
Sparge Water: 8.16 l
Sparge Temperature: 75.6 C
Adjust Temp for Equipment: FALSE

Total Grain Weight: 5.24 kg
Grain Temperature: 24.2 C
Tun Temperature: 24.2 C
Target Mash PH: 5.20
Mash Acid Addition:
Sparge Acid Addition:

Est Mash PH: 5.67
Measured Mash PH: 5.20

Mash Steps

Name	Description	Step Temperature	Step Time
Protein Rest	Add 9.80 l of water at 60.1 C	55.0 C	15 min
B-amylase rest	Heat to 63.0 C over 5 min	63.0 C	45 min
A-amylase	Heat to 68.0 C over 5 min	68.0 C	15 min

Sparge: Fly sparge with 8.16 l water at 75.6 C

Mash Notes: Two step profile with a protein rest for mashes with unmodified grains or adjuncts. Temperature mash for use when mashing in a brew pot over a heat source such as the stove. Use heat to maintain desired temperature during the mash.

Carbonation and Storage

Carbonation Type: Bottle
Pressure/Weight: 128.81 g
Keg/Bottling Temperature: 21.1 C
Fermentation: Ale, Two Stage

Volumes of CO2: 2.4
Carbonation Used: Bottle with 128.81 g Corn Sugar
Age for: 30.00 days
Storage Temperature: 18.3 C

Notes