

278 Broken Wings Pale 5 Gallon All Grain

American Pale Ale (18 B)

Type: All Grain
Batch Size: 5.00 gal
Boil Size: 6.53 gal
Boil Time: 60 min
End of Boil Vol: 5.99 gal
Final Bottling Vol: 4.60 gal
Fermentation: Ale, Two Stage

Date: 06 Aug 2021
Brewer: Thomas Monti
Asst Brewer:
Equipment: All Grain - Standard 5 Gal/19l Batch - Cooler
Efficiency: 72.00 %
Est Mash Efficiency: 82.8 %
Taste Rating: 30.0



Taste Notes:

Prepare for Brewing

- Hydrate yeast with 341.00 ml warm water and add optional 17.1 g of GoFerm
- Clean and Prepare Brewing Equipment
- Total Water Needed: 8.20 gal
- Mash Water Acid: None

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
4 lbs 3.0 oz	Malteurop Wheat (3.3 SRM)	Grain	1	35.4 %	0.33 gal
4 lbs 3.0 oz	Munich (Dingemans) (5.5 SRM)	Grain	2	35.4 %	0.33 gal
2 lbs 13.0 oz	Oats, Flaked (1.0 SRM)	Grain	3	23.8 %	0.22 gal
10.0 oz	Acid Malt (3.0 SRM)	Grain	4	5.3 %	0.05 gal

Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 3.77 gal of water at 168.0 F	156.0 F	45 min

- Sparge Water Acid: None
- Fly sparge with 4.43 gal water at 168.0 F

First Wort Hops

Amt	Name	Type	#	%/IBU	Volume
0.50 oz	Chinook [13.00 %] - First Wort 60.0 min	Hop	5	22.3 IBUs	-

- Add water to achieve boil volume of 6.53 gal
- Estimated pre-boil gravity is 1.056 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.50 oz	Amarillo [9.20 %] - Boil 10.0 min	Hop	6	5.2 IBUs	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
0.50 oz	Citra [12.00 %] - Steep/Whirlpool 40.0 min, 194.4 F	Hop	7	8.2 IBUs	-
0.50 oz	Galaxy [14.00 %] - Steep/Whirlpool 40.0 min, 194.4 F	Hop	8	9.6 IBUs	-

- Estimated Post Boil Vol: 5.99 gal and Est Post Boil Gravity: 1.064 SG

Cool and Transfer Wort

- Cool wort to fermentation temperature
- Transfer wort to fermenter
- Add water if needed to achieve final volume of 5.00 gal

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
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1.0 pkg | Safale American (DCL/Fermentis #US-05) [50.28 ml] | Yeast | 9 | - | -

- Measure Actual Original Gravity _____ (Target: 1.064 SG)
- Measure Actual Batch Volume _____ (Target: 5.00 gal)

Fermentation

- 06 Aug 2021 - Primary Fermentation (4.00 days at 67.0 F ending at 67.0 F)
- 10 Aug 2021 - Secondary Fermentation (10.00 days at 67.0 F ending at 67.0 F)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.50 oz	Citra [12.00 %] - Dry Hop 0.0 Days	Hop	10	0.0 IBUs	-
0.50 oz	Galaxy [14.00 %] - Dry Hop 0.0 Days	Hop	11	0.0 IBUs	-

- Measure Final Gravity: _____ (Estimate: 1.017 SG)
- Date Bottled/Kegged: 20 Aug 2021 - Carbonation: Bottle with 3.61 oz Corn Sugar
- Age beer for 30.00 days at 65.0 F
- 19 Sep 2021 - Drink and enjoy!

Notes