League Flashback (PE)

American Pale Ale (18 B)

Type: Partial Mash
Batch Size: 23.00 L
Boil Size: 7.00 L
Boil Time: 30 min
Final Bottling Vol: 21.49 L
Fermentation: Ale with Diacetyl Rest

Date: 21 Aug 2019
Efficiency: 75.00 %
Est Mash Efficiency: 0.0 %



Brewing Notes:
The average temperature of the 15 min hop stand should be around 85C.

1. Heat 1.2L of water to 70C, remove from heat, add grains mixing thoroughly, cover and let steep for 30 min.
2. When complete, remove grains and rinse with 5L of warm water.
3. Add 0.6kg of LME and top up to a total boil volume of 7L.
4. If flavour minerals are available, add to boil. Boil for 30 min adding boil hops as indicated.
5. When complete, remove from heat, let cool to 90C, add steep/whirlpool hops, cover and let stand for 15 min.
6. Dissolve the remaining LME as normal.
7. Strain out hops, add liquid to the LME mixture, and top up to 23 L.
8. Pitch at 18C, maintain for 3 days then let rise to 20C.
9. Once the fermentation is near completion, add the dry hops and raise the temp to 22C for a diacetyl rest. Maintain temp for another 5 days.
10. If possible, cold crash for a few days before packaging.
11. Carbonate to 2.6 - 2.7 volumes of CO2.

Mash or Steep Grains

Grains to Steep

Amt	Name	Type	#	%/IBU	Volume
0.400 kg	Gladfield Medium Crystal Malt [Steep] (123.0 EBC)	Grain	1	9.3 %	0.26 L

Mash Steps

Name	Description	Step Temperature	Step Time
Mash Step	Add 1.20 L of water and heat to 67.0 C over 0 min	67.0 C	30 min

◯ Add water to achieve boil volume of 7.00 L
◯ Estimated pre-boil gravity is 1.031 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.600 kg	Light Pure Liquid Malt Extract (MJ) [Boil] (6.5 EBC)	Extract	2	14.0 %	0.42 L
4.40 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	3	-	-
4.00 g	Calcium Chloride (Boil)	Water Agent	4	-	-
50.00 g	Cascade [6.80 %] - Boil 30.0 min	Hop	5	31.5 IBUs	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
100.00 g	Taiheke (NZ Cascade) [7.00 %] - Steep/Whirlpool 15.0…	Hop	6	14.1 IBUs	-

◯ Estimated Post Boil Vol: 6.58 L and Est Post Boil Gravity: 1.053 SG

Cool and Transfer Wort

◯ Cool wort to fermentation temperature
◯ Transfer wort to fermenter
◯ Add water if needed to achieve final volume of 23.00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
3.300 kg	Light Pure Liquid Malt Extract (MJ) [Primary] (6.5 EBC)	Extract	7	76.7 %	2.31 L
2.0 pkg	Safale American (DCL/Fermentis #US-05) [0.05 L]	Yeast	8	-	-

◯ Measure Actual Original Gravity _____ (Target: 1.053 SG)
◯ Measure Actual Batch Volume _____ (Target: 23.00 L)

Fermentation

◯ 21 Aug 2019 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
◯ 24 Aug 2019 - Secondary Fermentation (6.00 days at 20.0 C ending at 20.0 C)
◯ 30 Aug 2019 - Tertiary Fermentation (5.00 days at 22.0 C ending at 22.0 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
50.00 g	Cascade [6.80 %] - 3.0 Days Before Bottling for 5.0 Days	Hop	9	0.0 IBUs	-

◯ Measure Final Gravity: _____ (Estimate: 1.012 SG)
◯ Date Bottled/Kegged: - Carbonation: Bottle with 152.25 g Corn Sugar