League Shelby Wright (PE)

American IPA (21 A)

Type: Partial Mash
Batch Size: 23.00 L
Boil Size: 5.00 L
Boil Time: 30 min
Final Bottling Vol: 21.49 L
Fermentation: Ale with Diacetyl Rest

Date: 04 Jun 2019
Efficiency: 55.00 %
Est Mash Efficiency: 59.5 %



Brewing Notes:
Note, this recipe uses a very high sulphate to chloride ratio (7:1) when the flavour minerals are used. This is meant to accentuate the dryness and hoppiness of the beer. For the salt addition, use plain (non-iodised) table salt or canning salt.

1. Heat 1.25L 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 3L of warm water.
3. Add 0.6kg of LME and top up to a total boil volume of 5L.
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 80C, 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

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.230 kg	Gladfield Light Crystal Malt (63.0 EBC)	Grain	1	5.0 %	0.15 L
0.185 kg	Gladfield Gladiator Malt (10.0 EBC)	Grain	2	4.0 %	0.12 L

Mash Steps

Name	Description	Step Temperature	Step Time
Mash Step	Add 1.24 L of water and heat to 70.0 C over 0 min	70.0 C	30 min

Add water to achieve boil volume of 5.00 L
Estimated pre-boil gravity is 1.055 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
19.00 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	3	-	-
2.70 g	Epsom Salt (MgSO4) (Boil)	Water Agent	4	-	-
1.75 g	Calcium Chloride (Boil)	Water Agent	5	-	-
1.10 g	Salt (Boil)	Water Agent	6	-	-
0.600 kg	Light Pure Liquid Malt Extract (MJ) [Boil] [Boil for 30 min](6.5 EBC)	Extract	7	13.0 %	0.42 L

40.00 g	Pacific Jade [11.10 %] - Boil 20.0 min	Hop	8	31.8 IBUs	-
15.00 g	Taiheke [7.90 %] - Boil 20.0 min	Hop	9	8.5 IBUs	-
30.00 g	Taiheke [7.90 %] - Boil 10.0 min	Hop	10	13.2 IBUs	-
20.00 g	Centennial [9.80 %] - Boil 10.0 min	Hop	11	10.9 IBUs	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
25.00 g	Amarillo [7.90 %] - Steep/Whirlpool 15.0 min, 80.0 C	Hop	12	2.2 IBUs	-
25.00 g	Simcoe [14.20 %] - Steep/Whirlpool 15.0 min, 80.0 C	Hop	13	3.9 IBUs	-

Estimated Post Boil Vol: 4.58 L and Est Post Boil Gravity: 1.059 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
3.600 kg	Light Pure Liquid Malt Extract (MJ) [Primary] (6.5 EBC)	Extract	14	78.0 %	2.52 L
2.0 pkg	US West Coast (Mangrove Jack's #M44)	Yeast	15	-	-

Measure Actual Original Gravity _____ (Target: 1.059 SG)
Measure Actual Batch Volume _____ (Target: 23.00 L)

Fermentation

04 Jun 2019 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
07 Jun 2019 - Secondary Fermentation (6.00 days at 20.0 C ending at 20.0 C)
13 Jun 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
30.00 g	Centennial [9.80 %] - Dry Hop 5.0 Days	Hop	16	0.0 IBUs	-
25.00 g	Amarillo [7.90 %] - Dry Hop 5.0 Days	Hop	17	0.0 IBUs	-
25.00 g	Simcoe [14.20 %] - Dry Hop 5.0 Days	Hop	18	0.0 IBUs	-

Measure Final Gravity: _____ (Estimate: 1.011 SG)
Date Bottled/Kegged: - Carbonation: Keg with 13.72 PSI