League Sun Daze Golden Ale (PE)

British Golden Ale (12 A)

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: 12 Dec 2018
Efficiency: 55.00 %
Est Mash Efficiency: 59.5 %



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

1. Heat 5.3L of water to 68C, 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. Add rinse to mash water and top up to a total boil volume of 7L.
3. If flavour minerals are available, add to boil. Boil for 30 min adding boil hops as indicated.
4. When complete, remove from heat, let cool to 90C, add steep/whirlpool hops, cover and let stand for 15 min.
5. Dissolve LME as normal.
6. Strain out hops, add liquid to the LME mixture, and top up to 23 L.
7. Pitch at 18C, maintain for 3 days then let rise to 20C. Raise to 22C near end of fermentation for a diacetyl rest.
8. If possible, cold crash for a few days before packaging.
9. Carbonate to 2.4 - 2.5 volumes of CO2.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.700 kg	Pale Malt, Golden Promise (Thomas Fawcett) (5.9 EBC)	Grain	1	35.6 %	1.11 L
0.080 kg	Gladfield Sour Grapes Malt (acid malt) (4.0 EBC)	Grain	2	1.7 %	0.05 L

Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 5.34 L of water and heat to 65.0 C over 0 min	65.0 C	30 min

◯ Add water to achieve boil volume of 7.00 L
◯ Estimated pre-boil gravity is 1.046 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
4.50 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	3	-	-
4.00 g	Calcium Chloride (Boil)	Water Agent	4	-	-
20.00 g	Goldings [5.60 %] - Boil 30.0 min	Hop	5	10.0 IBUs	-
10.00 g	Cascade [6.80 %] - Boil 30.0 min	Hop	6	6.1 IBUs	-
40.00 g	Cascade [6.80 %] - Boil 5.0 min	Hop	7	13.3 IBUs	-
30.00 g	Goldings [5.60 %] - Boil 5.0 min	Hop	8	8.2 IBUs	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
50.00 g	Mosaic (HBC 369) [12.60 %] - Steep/Whirlpool 15.0 mi…	Hop	9	11.1 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
1.500 kg	Light Pure Liquid Malt Extract (MJ) [Primary] (6.5 EBC)	Extract	10	31.4 %	1.05 L
1.500 kg	Pure Liquid Malt Extract - Wheat (MJ) [Primary] (6.0 EBC)	Extract	11	31.4 %	1.06 L
2.0 pkg	SafAle English Ale (DCL/Fermentis #S-04) [0.02 L]	Yeast	12	-	-

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

Fermentation

◯ 12 Dec 2018 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
◯ 15 Dec 2018 - Secondary Fermentation (6.00 days at 20.0 C ending at 20.0 C)
◯ 21 Dec 2018 - Tertiary Fermentation (5.00 days at 22.0 C ending at 22.0 C)

Dry Hop and Bottle/Keg

◯ Measure Final Gravity: _____ (Estimate: 1.014 SG)
◯ Date Bottled/Kegged: - Carbonation: Bottle with 126.38 g Corn Sugar