League Darkside (PE)

Oatmeal Stout (16 B)

Type: Partial Mash
Batch Size: 23.00 L
Boil Size: 7.00 L
Boil Time: 20 min
Final Bottling Vol: 21.49 L
Fermentation: Ale with Diacetyl Rest

Date: 19 Jul 2019
Efficiency: 55.00 %
Est Mash Efficiency: 59.5 %



Brewing Notes:
1. Heat 5L 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. Top up to a total boil volume of 7L.
4. If flavour minerals are available, add to boil. Boil for 20 min adding boil hops as indicated.
5. Dissolve the remaining 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.
8. Once the fermentation is near completion, raise the temp to 22C for a diacetyl rest. Maintain temp for another 5 days.
9. If possible, cold crash for a few days before packaging.
10. Carbonate to 2.6 - 2.7 volumes of CO2.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.480 kg	Oats, Golden Naked®™ (Simpsons) (18.0 EBC)	Grain	1	9.1 %	0.31 L
0.360 kg	Gladfield Biscuit Malt (60.0 EBC)	Grain	2	6.8 %	0.23 L
0.360 kg	Gladfield Light Chocolate Malt (900.0 EBC)	Grain	3	6.8 %	0.23 L
0.240 kg	Gladfield Dark Crystal Malt (190.0 EBC)	Grain	4	4.5 %	0.16 L
0.240 kg	Gladfield Roast Barley (1450.0 EBC)	Grain	5	4.5 %	0.16 L

Mash Steps

Name	Description	Step Temperature	Step Time
Mash Step	Add 5.04 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 1.040 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
3.80 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	6	-	-
1.70 g	Calcium Chloride (Boil)	Water Agent	7	-	-
1.70 g	Salt (Boil)	Water Agent	8	-	-
100.00 g	East Kent Goldings (EKG) [5.40 %] - Boil 20.0 min	Hop	9	36.4 IBUs	-

Estimated Post Boil Vol: 6.72 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	10	68.2 %	2.52 L
2.0 pkg	Safale American (DCL/Fermentis #US-05) [0.05 L]	Yeast	11	-	-

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

Fermentation

19 Jul 2019 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
22 Jul 2019 - Secondary Fermentation (6.00 days at 20.0 C ending at 20.0 C)
28 Jul 2019 - 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 152.25 g Corn Sugar