League Darkside (AG)

Oatmeal Stout (16 B)

Type: All Grain
Batch Size: 23.00 L
Boil Size: 28.50 L
Boil Time: 60 min
Final Bottling Vol: 22.00 L
Fermentation: Ale with Diacetyl Rest

Date: 19 Jul 2019
Efficiency: 75.00 %
Est Mash Efficiency: 81.5 %



Brewing Notes:
1. If flavour minerals are available, add to boil only as mash pH is taken care of by the specialty malts.
2. For the salt addition, use plain (non-iodised) table salt or canning salt. This is included because the added sodium can enhance dark beer flavour.
3. If available, add yeast nutrient and kettle finings 10 min prior to the end of boil.
4. Pitch at 18C and maintain for 3 days then let rise to 20C. Once fermentation is near completion, raise the temp to 22C for a diacetyl rest and hold until fermentation is complete.
5. If possible, cold crash for a few days before packaging.
6. Carbonate to 2.6 - 2.7 volumes of CO2.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
4.280 kg	Gladfield Ale Malt (6.0 EBC)	Grain	1	71.8 %	2.79 L
0.480 kg	Harraway's Rolled Oats (2.8 EBC)	Grain	2	8.1 %	0.31 L
0.360 kg	Gladfield Biscuit Malt (60.0 EBC)	Grain	3	6.0 %	0.23 L
0.360 kg	Gladfield Light Chocolate Malt (900.0 EBC)	Grain	4	6.0 %	0.23 L
0.240 kg	Gladfield Dark Crystal Malt (190.0 EBC)	Grain	5	4.0 %	0.16 L
0.240 kg	Gladfield Roast Barley (1450.0 EBC)	Grain	6	4.0 %	0.16 L

Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 19.59 L of water at 74.7 C	69.0 C	40 min
Mash Out	Heat to 76.0 C over 10 min	76.0 C	10 min

Fly sparge with 14.88 L water at 76.0 C
Add water to achieve boil volume of 28.50 L
Estimated pre-boil gravity is 1.052 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
3.80 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	7	-	-
1.70 g	Calcium Chloride (Boil)	Water Agent	8	-	-
1.70 g	Salt (Boil)	Water Agent	9	-	-
100.00 g	East Kent Goldings (EKG) [5.40 %] - Boil 25.0 min	Hop	10	37.1 IBUs	-

Estimated Post Boil Vol: 26.00 L and Est Post Boil Gravity: 1.060 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
2.0 pkg	Safale American (DCL/Fermentis #US-05) [0.05 L]	Yeast	11	-	-

Measure Actual Original Gravity _____ (Target: 1.060 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: 1.016 SG)
Date Bottled/Kegged: - Carbonation: Bottle with 155.90 g Corn Sugar