

Winterfell Imperial Stout AG

Imperial Stout (20 C)

Type: All Grain
Batch Size: 5.25 gal
Boil Size: 7.23 gal
Boil Time: 90 min
End of Boil Vol: 5.73 gal
Final Bottling Vol: 5.00 gal
Fermentation: Ale, Two Stage

Date: 11 May 2011
Brewer:
Asst Brewer:
Equipment: Brew Pot (7.5 gal) and Igloo Cooler (10 Gal)
Efficiency: 68.00 %
Est Mash Efficiency: 71.2 %
Taste Rating: 35.0



Taste Notes:

Prepare for Brewing

- Clean and Prepare Brewing Equipment
- Total Water Needed: 9.88 gal
- Mash Water Acid:

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU
15 lbs	Pale Ale Malt 2-Row (Briess) (3.5 SRM)	Grain	1	75.0 %
2 lbs	Bonlander Munich Malt (Briess) (10.0 SRM)	Grain	2	10.0 %
1 lbs	Barley, Flaked (Briess) (1.7 SRM)	Grain	3	5.0 %
8.0 oz	Black Malt - 2-Row (Briess) (500.0 SRM)	Grain	4	2.5 %
8.0 oz	Caramel Malt - 120L (Briess) (120.0 SRM)	Grain	5	2.5 %
8.0 oz	Caramel Malt - 40L (Briess) (40.0 SRM)	Grain	6	2.5 %
8.0 oz	Chocolate (Briess) (350.0 SRM)	Grain	7	2.5 %

Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 6.50 gal of water at 167.8 F	156.0 F	45 min

- Sparge Water Acid:
- Batch sparge with 2 steps (Drain mash tun , 3.38gal) of 168.0 F water
- Add water to achieve boil volume of 7.23 gal
- Estimated pre-boil gravity is 1.071 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU
1.00 oz	Warrior [15.00 %] - Boil 60.0 min	Hop	8	42.6 IBUs
1.00 oz	Nugget [13.00 %] - Boil 30.0 min	Hop	9	28.4 IBUs

- Estimated Post Boil Vol: 5.73 gal and Est Post Boil Gravity: 1.094 SG

Cool and Transfer Wort

- Cool wort to fermentation temperature

- Transfer wort to fermenter
- Add water if needed to achieve final volume of 5.25 gal

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU
2.0 pkg	Safale American (DCL/Fermentis #US-05) [50....	Yeast	10	-

- Measure Actual Original Gravity _____ (Target: 1.094 SG)
- Measure Actual Batch Volume _____ (Target: 5.25 gal)
- Add water if needed to achieve final volume of 5.25 gal

Fermentation

- 11 May 2011 - Primary Fermentation (7.00 days at 67.0 F ending at 67.0 F)
- 18 May 2011 - Secondary Fermentation (7.00 days at 67.0 F ending at 67.0 F)

Dry Hop and Bottle/Keg

- Measure Final Gravity: _____ (Estimate: 1.025 SG)
- Date Bottled/Kegged: 25 May 2011 - Carbonation: Bottle with 4.20 oz Corn Sugar
- Age beer for 30.00 days at 65.0 F
- 24 Jun 2011 - Drink and enjoy!

Notes