

# Buckwheat Stout V2-Homebrew

**Type:** All Grain  
**Batch Size:** 5.0 gal  
**Boil Size:** 5.7 gal  
**Boil Time:** 60 min  
**End of Boil Vol:** 5.5 gal  
**Final Bottling Vol:** 4.8 gal  
**Fermentation:** Ale, Two Stage  
**Taste Notes:**



## Prepare for Brewing

Total Water Needed: 7.3 gal

## Water Prep

Amt	Name	Type	#	%/IBU	Volume
7.3 gal	Distilled Water	Water	1	-	-
1.93 g	Calcium Chloride (Mash)	Water Agent	2	-	-
1.82 g	Baking Soda (Mash)	Water Agent	3	-	-
1.65 g	Epsom Salt (MgSO4) (Mash)	Water Agent	4	-	-
0.52 g	Gypsum (Calcium Sulfate) (Mash)	Water Agent	5	-	-
0.21 g	Chalk (Mash)	Water Agent	6	-	-

## Mash or Steep Grains

### Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
4 lbs	Buckwheat, Pale, Grouse (2.0 SRM)	Grain	7	36.9 %	0.3 gal
3 lbs 5.0 oz	Rice, Biscuit, Eckert (2.0 SRM)	Grain	8	30.7 %	0.3 gal
2 lbs 4.0 oz	Millet, Caramel 120L, Grouse (165.0 SRM)	Grain	9	20.8 %	0.2 gal
1 lbs 4.0 oz	Buckwheat, Roasted, Grouse (25.0 SRM)	Grain	10	11.6 %	0.1 gal
13.00 ml	Ondea Pro (Mash 130.0 mins)	Other	11	-	-
10.00 ml	Ceremix Flex (Mash 130.0 mins)	Other	12	-	-
10.00 ml	Termamyl SC (Mash 130.0 mins)	Other	13	-	-

### Mash Steps

Name	Description	Step Temperature	Step Time
Mash Step	Add 3.8 gal of water at 138.58 F	125.00 F	20 min
Mash Step	Heat to 175.00 F over 60 min	175.00 F	60 min

- Fly sparge with 3.5 gal water at 212.00 F
- Add water to achieve boil volume of 5.7 gal
- Estimated pre-boil gravity is 1.054 SG

## Notes

### Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.25 oz	Columbus (Tomahawk) [14.30 %] - Boil 60.0 min	Hop	14	12.7 IBUs	-
1.76 g	Calcium Chloride (Boil)	Water Agent	15	-	-
1.66 g	Baking Soda (Boil)	Water Agent	16	-	-
1.50 g	Epsom Salt (MgSO4) (Boil)	Water Agent	17	-	-
0.48 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	18	-	-
0.19 g	Chalk (Boil)	Water Agent	19	-	-
0.50 oz	Willamette [6.30 %] - Boil 30.0 min	Hop	20	9.2 IBUs	-
1.00 Items	Whirlfloc Tablet (Boil 15.0 mins)	Fining	21	-	-
1.61 g	Yeastex 61 (Boil 10.0 mins)	Other	22	-	-

Estimated Post Boil Vol: 5.5 gal 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 5.0 gal

### Pitch Yeast and Measure Gravity and Volume

#### Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.0 pkg	SafBrew Ale (DCL/Fermentis #S-33) [23.7 ml]	Yeast	23	-	-

- Measure Actual Original Gravity \_\_\_\_\_ (Target: 1.059 SG)
- Measure Actual Batch Volume \_\_\_\_\_ (Target: 5.0 gal)

#### Fermentation

- Primary temp: 67.00 F Primary length: 12.00 days
- Secondary temp: 67.00 F Secondary length: 0.00 days
- Tertiary temp: 65.00 F Tertiary length: 7.00 days

#### Dry Hop and Bottle/Keg

- Measure Final Gravity: \_\_\_\_\_ (Estimate: 1.021 SG)
- Carbonation: Keg with 12.54 PSI
- Drink and enjoy!