

ENGLISH PALE ALE

Type: All Grain
Batch Size: 10.00 L
Boil Size: 14 L

End of Boil Vol: 11.50 L
Final Bottling Vol: 10.00 L
Boil Time: 60 min

Fermentation: Ale, Two Stage
Efficiency: 75.00 %
Est Mash Efficiency: 82.1 %

Prepare for Brewing

- Hydrate yeast with 164.47 ml warm
- Clean and Prepare Brewing Equipment
- Total Water Needed: 17 L
- Mash Water Acid: None

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.00 kg	CHÂTEAU PILSEN 2RS (3.0 EBC)	Grain	1	40.0 %	0.65 L
0.50 kg	CHÂTEAU PALE ALE (8.5 EBC)	Grain	2	20.0 %	0.33 L
0.50 kg	CHÂTEAU VIENNA (5.5 EBC)	Grain	3	20.0 %	0.33 L
0.25 kg	CHÂTEAU ARÔME (100.0 EBC)	Grain	4	10.0 %	0.16 L
0.25 kg	CHÂTEAU CARA BLOND® (20.0 EBC)	Grain	5	10.0 %	0.16 L

Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 6.5 L of water at 76.5 C	67.8 C	60 min
Mash Out	Add 3.5 L of water at 92.4 C	75.6 C	10 min

- Sparge Water Acid: None
- Fly sparge with 7 L water at 75.6 C
- Add water to achieve boil volume of 13.5 L
- Estimated pre-boil gravity is 11.512 Brix

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
15.00 g	Goldings, East Kent [4.10 %] - Boil 60.0 min	Hop	6	13.3 IBUs	-
10.00 g	Goldings, East Kent [4.10 %] - Boil 30.0 min	Hop	7	6.8 IBUs	-
15.00 g	Fuggles [4.90 %] - Boil 15.0 min	Hop	8	8.7 IBUs	-
8.00 ml	Spindasol SB1 (Boil)	Fining	9	-	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
10.00 g	Fuggles [4.90 %] - Steep/Whirlpool 5.0 min, 90.2 C	Hop	10	1.1 IBUs	-

- Estimated Post Boil Vol: 11.40 L and Est Post Boil Gravity: 14 Brix

Cool and Transfer Wort

- Cool wort to fermentation temperature
- Transfer wort to fermenter
- Add water if needed to achieve final volume of 10.00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.0 pkg	FERMOALE - AEB (AEB #FERMOALE)	Yeast	11	-	-

- Measure Actual Original Gravity _____ (Target: 14 Brix)
- Measure Actual Batch Volume _____ (Target: 10.00 L)

Fermentation

- Primary Fermentation (4.00 days at 19.4 C ending at 19.4 C)
- Secondary Fermentation (10.00 days at 19.4 C ending at 19.4 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
25.00 g	Fuggles [4.90 %] - 3.0 Days Before Bottling for 3.0 Days	Hop	12	0.0 IBUs	-
8.00 ml	Spindasol SB3 (Bottling)	Fining	13	-	-

- Measure Final Gravity: _____ (Estimate: 4.210 Brix)
- Date Bottled/Kegged: _____ -
- Age beer for 30.00 days at 18.3 C