

MAC AND JACK AG

Created Tuesday January 15th 2019



NWBS

Method: **All Grain** Style: **American Amber Ale** Boil Time: **60 min** Batch Size: **5.5 gallons** (ending kettle volume)

Pre Boil Size: **6.5 gallons** Pre Boil Gravity: **1.051** (recipe based estimate) Efficiency: **70%** (ending kettle)

Calories: **199 calories** (Per 12oz) Carbs: **20.5 g** (Per 12oz)

Original Gravity: **1.060** Final Gravity: **1.015** ABV (standard): **5.89%** IBU (tinseth): **38.28** SRM (morey): **9.48** Mash pH: **n/a** Cost \$: **n/a**

Fermentables

Amount	Fermentable	Cost	PPG	°L	Bill %
5.75 lb	United Kingdom - Maris Otter Pale		38	3.75	45.1%
5 lb	American - Pale 2-Row		37	1.8	39.2%
1 lb	Briess - Bonlander Munich		36	10	7.8%
0.50 lb	American - Caramel / Crystal 80L		33	80	3.9%
0.50 lb	American - Carapils (Dextrine Malt)		33	1.8	3.9%

12.75 lb / \$ 0.00

Hops

Amount	Variety	Cost	Type	AA	Use	Time	IBU	Bill %
1 oz	Centennial		Pellet	10.5	Boil	60 min	35.99	44.4%
1.25 oz	Cascade		Pellet	6.3	Boil	2 min	2.28	55.6%

2.25 oz / \$ 0.00

Hops Summary

Amount	Variety	Cost	IBU	Bill %
1 oz	Centennial (Pellet)		35.99	44.4%
1.25 oz	Cascade (Pellet)		2.28	55.6%

2.25 oz / \$ 0.00

Mash Guidelines

Amount	Description	Type	Temp	Time
		Infusion	153 °F	60 min

Starting Mash Thickness: 1.33 qt/lb

Yeast

Wyeast - British Ale 1098

Amount: 1 Each Cost: Attenuation (avg): 74% Flocculation: Med-High

Optimum Temp: 64 - 72 °F Starter: No

Fermentation Temp: - Pitch Rate: 0.35 (*M cells / ml / ° P*) 107 B cells required

Priming

CO₂ Level: 2.52 Volumes

Target Water Profile

 Balanced Profile

Ca⁺² 0 Mg⁺² 0 Na⁺ 0 Cl⁻ 0 SO₄⁻² 0 HCO₃⁻ 0