

# Cascade Pale Ale AG\*

Created Thursday January 17th 2019



NWBS

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

Pre Boil Size: **6.5 gallons** Pre Boil Gravity: **1.044** (recipe based estimate) Efficiency: **70%** (ending kettle)

Calories: **168 calories** (Per 12oz) Carbs: **17.6 g** (Per 12oz)

Original Gravity: **1.051** Final Gravity: **1.013** ABV (standard): **5.11%** IBU (tinseth): **37.15** SRM (morey): **5.69** Mash pH: **n/a** Cost \$: **n/a**

## Fermentables

Amount	Fermentable	Cost	PPG	°L	Bill %
10 lb	Pale 2-Row		37	1.8	90.9%
0.50 lb	American - Caramel / Crystal 40L		34	40	4.5%
0.50 lb	Briess - Carapils Malt		34.5	1.5	4.5%

**11 lb / \$ 0.00**

## Hops

Amount	Variety	Cost	Type	AA	Use	Time	IBU	Bill %
1.25 oz	Cascade		Pellet	7	Boil	60 min	32.04	55.6%
1 oz	Cascade		Pellet	7	Aroma	5 min	5.11	44.4%

**2.25 oz / \$ 0.00**

## Hops Summary

Amount	Variety	Cost	IBU	Bill %
2.25 oz	Cascade (Pellet)		37.15	100%

**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 - American Ale 1056

Amount: 1 Each Cost: Attenuation (custom): 75% Flocculation: Med-Low

Optimum Temp: 60 - 72 °F Starter: No

Fermentation Temp: - Pitch Rate: 0.35 (*M cells / ml / ° P*) 92 B cells required

## Priming

CO<sub>2</sub> Level: 4.04 Volumes

## Target Water Profile Balanced Profile

Ca<sup>+2</sup> 0

Mg<sup>+2</sup> 0

Na<sup>+</sup> 0

Cl<sup>-</sup> 0

SO<sub>4</sub><sup>-2</sup> 0

HCO<sub>3</sub><sup>-</sup> 0