

# APA Single Hop Cascade

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **18**
- SRM **7.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **11.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.3 liter(s)**
- Total mash volume **8.4 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **6.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **11.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.89 kg (90%)	82 %	4
Grain	Strzegom Karmel 150	0.14 kg (6.7%)	75 %	150
Grain	Viking Wheat Malt	0.07 kg (3.3%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	4 g	60 min	5.5 %
Boil	Cascade PL	4 g	30 min	5.5 %
Aroma (end of boil)	Cascade PL	10 g	15 min	5.5 %
Whirlpool	Cascade PL	13 g	5 min	5.5 %
Dry Hop	Cascade	17 g	5 day(s)	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis