

# Cascade PL Ale

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- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **31**
- SRM **4.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (42.9%)	80 %	5
Grain	Viking Pilsner malt	1.5 kg (42.9%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (14.3%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	15 g	60 min	5.5 %
Boil	Cascade PL	20 g	20 min	5.5 %
Aroma (end of boil)	Cascade PL	20 g	8 min	5.5 %
Dry Hop	Cascade PL	45 g	5 day(s)	5.5 %
Dry Hop	Cascade PL	50 g	3 day(s)	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis