

## APA Chinnok Cascade PL

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **40**
- SRM **3.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Optima	5 kg (100%)	82 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	10 %
Boil	Cascade	20 g	15 min	5.5 %
Aroma (end of boil)	Chinook	20 g	5 min	10 %
Aroma (end of boil)	Cascade	30 g	5 min	5.5 %
Whirlpool	Cascade	50 g	30 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54	Ale	Liquid	100 ml	Fermentum Mobile