

APA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **26**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (92.6%)	80 %	5
Grain	Cara-Pils/Dextrine	0.4 kg (7.4%)	72 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	60 min	12 %
Boil	Citra	5 g	30 min	12 %
Boil	Mosaic	5 g	30 min	10 %
Aroma (end of boil)	Citra	6 g	15 min	12 %
Aroma (end of boil)	Mosaic	10 g	15 min	10 %
Aroma (end of boil)	Cascade	5 g	15 min	6 %
Whirlpool	Mosaic	10 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis