

APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **41**
- SRM **3.7**
- 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 **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (80%)	82 %	4
Grain	Viking Pale Ale	1 kg (20%)	80 %	3.8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	9.5 %
Boil	Citra	24 g	15 min	12.6 %
Boil	Citra	24 g	5 min	12.6 %

Yeasts

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