

APA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **45**
- SRM **4.1**
- 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 **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- 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	Pilzneński	2.6 kg (48.1%)	81 %	4
Grain	Viking Pale Ale malt	2.8 kg (51.9%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	60 min	11.6 %
Boil	Chinook	25 g	15 min	11.2 %
Aroma (end of boil)	Citra	25 g	0 min	12 %
Aroma (end of boil)	Chinook	25 g	0 min	11.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-04	Ale	Dry	11.5 g	---