

APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **41**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (54.2%)	80 %	5
Grain	Pszeniczny	0.53 kg (9.6%)	85 %	4
Grain	Pilzneński	2 kg (36.2%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Citra	20 g	30 min	12 %
Boil	Citra	10 g	10 min	12 %
Boil	Mosaic	20 g	10 min	10 %
Dry Hop	Chinook	10 g	10 day(s)	13 %
Dry Hop	Mosaic	10 g	3 day(s)	10 %
Dry Hop	Chinook	10 g	3 day(s)	13 %
Dry Hop	Bravo	30 g	3 day(s)	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale