

APA Papa

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **28**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (58.1%)	80 %	5
Grain	Pilznieński	1.3 kg (30.2%)	81 %	4
Grain	Pszeniczny	0.5 kg (11.6%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	45 min	10.5 %
Boil	Citra	15 g	10 min	12 %
Boil	Cascade	15 g	10 min	6 %
Dry Hop	Chinook	10 g	5 day(s)	13 %
Dry Hop	Simcoe	30 g	5 day(s)	13.2 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %

Yeasts

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