

APA #1

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 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 **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.8 kg (96%)	80 %	5
Grain	Pszeniczny	0.2 kg (4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	11.5 %
Boil	Simcoe	20 g	30 min	11.5 %
Aroma (end of boil)	Amarillo	30 g	0 min	7.1 %
Dry Hop	Amarillo	30 g	3 day(s)	7.1 %
Dry Hop	Citra	20 g	3 day(s)	12.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	150 ml	Fermentum Mobile