

# 1 APA

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **36**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (91.4%)	80 %	5
Grain	Słód Caramunich Typ II Weyermann	0.15 kg (4.3%)	73 %	120
Grain	Briess DME - Golden Light	0.15 kg (4.3%)	95 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Cascade PL	30 g	30 min	5.2 %
Boil	Cascade PL	10 g	1 min	5.2 %
Dry Hop	Cascade PL	80 g	7 day(s)	5.2 %
Dry Hop	Simcoe	50 g	7 day(s)	13.2 %

## Yeasts

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