

# APA Sabro

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **52 C**, Time **25 min**
- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **57C**
- Add grains
- Keep mash **25 min** at **52C**
- Keep mash **60 min** at **67C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (40%)	80 %	6
Grain	Pszeniczny	1 kg (20%)	85 %	4
Grain	Żytni	0.75 kg (15%)	85 %	6
Grain	Słód owsiany Fawcett	0.75 kg (15%)	61 %	5
Grain	Płatki owsiane	0.5 kg (10%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	50 min	15.5 %
Aroma (end of boil)	Sabro	15 g	5 min	15.8 %
Whirlpool	Sabro	20 g	15 min	15.8 %
Dry Hop	Sabro	30 g	5 day(s)	15.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	Fermentis