

# Single Hop Sabro APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **4.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **30 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **30 min** at **76C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (50%)	85 %	7
Grain	Weyermann - Pilsner Malt	2 kg (33.3%)	81 %	5
Grain	Weyermann - Pale Wheat Malt	1 kg (16.7%)	85 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sabro	10 g	60 min	15 %
Aroma (end of boil)	Sabro	40 g	10 min	15 %
Dry Hop	Sabro	50 g	7 day(s)	15 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	Kwas mlekowy	4 g	Mash	60 min
Water Agent	Witamina C	4 g	Bottling	---