

# Single Hop Sabro APA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **31**
- SRM **4.8**
- 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 **65 min**
- Evaporation rate **8 %/h**
- Boil size **29.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3 kg (46.2%)	80 %	8
Grain	Castle Pilsen 2RS	3 kg (46.2%)	80.5 %	4
Grain	Platki owsiane	0.5 kg (7.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sabro Uniw.	15 g	60 min	15.1 %
Aroma (end of boil)	Sabro Uniw.	25 g	10 min	15.1 %
Dry Hop	Sabro Uniw.	60 g	2 day(s)	15.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	100 ml	---

## Extras

Type	Name	Amount	Use for	Time
Fining	protafloc	1 g	Boil	15 min