

# GrillAPA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **37**
- SRM **4.3**
- 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 **4 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **29.5 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **65 C**, Time **10 min**
- Temp **68 C**, Time **10 min**
- Temp **70 C**, Time **10 min**

## Mash step by step

- Heat up **23.6 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **10 min** at **65C**
- Keep mash **10 min** at **68C**
- Keep mash **10 min** at **70C**
- Sparge using **8.7 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	5 kg (84.7%)	80 %	5
Grain	Rice, Flaked	0.9 kg (15.3%)	70 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vic Secret	20 g	60 min	16.3 %
Aroma (end of boil)	Nelson Sauvín	20 g	5 min	11 %
Dry Hop	Vic Secret	30 g	7 day(s)	16.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	50 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	pulpa ananasowa	1000 g	Secondary	9 day(s)