

## apa

- Gravity **14.7 BLG**
- ABV ---
- IBU **62**
- SRM **3.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (94.3%)	81 %	2
Grain	Carahell	0.3 kg (5.7%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	60 min	12.2 %
Boil	Amarillo	20 g	30 min	8.8 %
Boil	Mosaic	10 g	15 min	12.2 %
Boil	Amarillo	20 g	15 min	8.8 %
Boil	Amarillo	20 g	5 min	8.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Other	mus z kiwi	1500 g	Secondary	7 day(s)