

## APA

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **18**
- SRM **3.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**

### Mash step by step

- Heat up **17.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **31.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.6 kg (96.6%)	81 %	4
Grain	Oats, Malted	0.2 kg (3.4%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	30 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Slant	70 ml	Mangrove Jack's