

## APA #1

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- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **32**
- SRM **6.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 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 **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Karmelowy Jasny 30EBC	1 kg (16.7%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Aroma (end of boil)	Willamette	30 g	10 min	5 %