

## APA #1

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **5.8**
- 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 **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

### Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (94.3%)	81 %	2.5
Grain	Briess - Caracrytal Wheat Malt	0.3 kg (5.7%)	78 %	108

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Loral	13 g	60 min	23.2 %
Aroma (end of boil)	Citra	90 g	0 min	11.6 %
Dry Hop	Citra	90 g	4 day(s)	11.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale