

## #52 APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **4.7**
- 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 **25.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Zero	2.5 kg (55.6%)	80 %	6.25
Grain	Pilzneński	0.5 kg (11.1%)	81 %	4
Grain	Monachijski Jasny	0.5 kg (11.1%)	80 %	15
Grain	Wiedeński	0.5 kg (11.1%)	80 %	9
Grain	Pszeniczny	0.5 kg (11.1%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Jarrylo	10 g	60 min	15 %
Boil	Amarillo	10 g	15 min	8.9 %
Boil	Citra	10 g	10 min	14.2 %
Boil	Calypso	10 g	5 min	15.4 %
Dry Hop	Jarrylo	10 g	7 day(s)	15 %
Dry Hop	Amarillo	10 g	7 day(s)	8.9 %
Dry Hop	Citra	10 g	7 day(s)	14.2 %
Dry Hop	Calypso	10 g	7 day(s)	15.4 %

### Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Ale	Dry	11 g	Fermentis