

APA

- Gravity **11.1 BLG**
- ABV ---
- IBU **35**
- SRM **5.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **10 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **58.8 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **33.8 liter(s)** of **76C** water or to achieve **58.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	8 kg (80%)	80.5 %	2
Grain	Vienna Malt	1 kg (10%)	78 %	9
Grain	Briess - Carapils Malt	0.5 kg (5%)	74 %	2
Grain	Fawcett - Pale crystal	0.5 kg (5%)	70 %	85

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	60 min	12 %
Boil	Citra	25 g	30 min	12 %
Boil	Citra	50 g	5 min	12 %
Boil	Amarillo	50 g	0 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	400 ml	White Labs