

1.AIPA

- Gravity **15 BLG**
- ABV ---
- IBU **82**
- SRM **11.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.8 kg (88.9%)	80 %	4
Grain	Fawcett - Crystal	0.4 kg (7.4%)	78 %	150
Grain	Aromatic Malt	0.2 kg (3.7%)	78 %	51

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	35 g	55 min	15.5 %
Boil	Cascade	20 g	15 min	6 %
Boil	citra	25 g	10 min	13.5 %
Boil	Cascade	25 g	5 min	6 %
Boil	citra	25 g	3 min	13.5 %
Dry Hop	Cascade	15 g	3 day(s)	6 %
Dry Hop	citra	15 g	3 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min