

Apa false single hop

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **40**
- SRM **5.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (100%)	85 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	60 min	11.8 %
Boil	Magnum	10 g	30 min	14 %
Aroma (end of boil)	Mosaic	20 g	15 min	11.8 %
Aroma (end of boil)	Citra	20 g	0 min	14.2 %
Aroma (end of boil)	Mosaic	10 g	0 min	11.8 %
Dry Hop	Mosaic	10 g	7 day(s)	11.8 %
Dry Hop	Citra	20 g	7 day(s)	14.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis