

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 |