

# 1.AIPA

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- 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 |