

## #4\_AIPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **58**
- SRM **6.7**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **27.1 liter(s)**
- Total mash volume **34.9 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **27.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 6 kg (77.4%)    | 80 %  | 5   |
| Grain | Pszeniczny           | 1.25 kg (16.1%) | 85 %  | 4   |
| Grain | Biscuit Malt         | 0.5 kg (6.5%)   | 79 %  | 45  |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | lunga    | 50 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Amarillo | 20 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Citra    | 20 g   | 5 min    | 12 %       |
| Whirlpool           | Amarillo | 30 g   | 0 min    | 9.5 %      |
| Whirlpool           | Citra    | 30 g   | 0 min    | 12 %       |
| Dry Hop             | Amarillo | 200 g  | 3 day(s) | 9.5 %      |

### Yeasts

| Name                              | Type | Form  | Amount | Laboratory      |
|-----------------------------------|------|-------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale  | Slant | 150 ml | Mangrove Jack's |