

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **58**
- SRM **10.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 4 kg (65.6%)   | 80 %  | 5   |
| Grain | Strzegom Monachijski typ I | 0.7 kg (11.5%) | 79 %  | 16  |
| Grain | Cara Gold Castlemalting    | 0.5 kg (8.2%)  | 78 %  | 120 |
| Grain | Karmelowy Czerwony         | 0.4 kg (6.6%)  | 75 %  | 59  |
| Grain | Pszeniczny                 | 0.5 kg (8.2%)  | 85 %  | 4   |

### Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | zeus    | 10 g   | 60 min   | 15.7 %     |
| Boil      | Simcoe  | 25 g   | 60 min   | 11.4 %     |
| Boil      | Citra   | 20 g   | 15 min   | 13.5 %     |
| Boil      | Ahtanum | 10 g   | 5 min    | 3.4 %      |
| Whirlpool | Ahtanum | 15 g   | 0 min    | 3.4 %      |
| Dry Hop   | Ahtanum | 25 g   | 7 day(s) | 3.4 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                                     |     |     |      |                 |
|-------------------------------------|-----|-----|------|-----------------|
| Mangrove Jack's<br>M79 Burton Union | Ale | Dry | 11 g | Mangrove Jack's |
|-------------------------------------|-----|-----|------|-----------------|