

# Wojownik

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **159**
- SRM **9.1**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **21.7 liter(s)**

## Mash information

- Mash efficiency **57 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**

## Mash step by step

- Heat up **28 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **60 min** at **63C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount       | Yield | EBC |
|-------|-----------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt        | 5 kg (62.5%) | 80 %  | 5   |
| Grain | Strzegom Monachijski typ II | 2 kg (25%)   | 79 %  | 22  |
| Grain | Pszeniczny                  | 1 kg (12.5%) | 85 %  | 4   |

## Hops

| Use for | Name                   | Amount | Time     | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 50 g   | 60 min   | 15 %       |
| Boil    | Citra                  | 20 g   | 25 min   | 13 %       |
| Boil    | Simcoe                 | 20 g   | 25 min   | 13.1 %     |
| Boil    | Citra                  | 20 g   | 15 min   | 13 %       |
| Boil    | Simcoe                 | 20 g   | 15 min   | 13.1 %     |
| Boil    | Citra                  | 20 g   | 5 min    | 13 %       |
| Boil    | Simcoe                 | 20 g   | 5 min    | 13.1 %     |
| Dry Hop | Simcoe                 | 60 g   | 3 day(s) | 13.1 %     |
| Dry Hop | Citra                  | 60 g   | 3 day(s) | 13 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | Fermentis  |