

Leave my hops alone

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **28**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **6.8 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **0.1 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|--------|-----|
| Grain | GlobalMalt Pale Ale/Pils | 2 kg (76.9%) | 82 % | 5 |
| Grain | GlobalMalt Monachijski I | 0.25 kg (9.6%) | 80.2 % | 16 |
| Grain | Płatki owsiane | 0.25 kg (9.6%) | 85 % | 3 |
| Grain | GlobalMalt Pszeniczny | 0.1 kg (3.8%) | 84 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Whirlpool | Mosaic | 20 g | 5 min | 12 % |
| Whirlpool | Cascade | 60 g | 5 min | 5.3 % |
| Whirlpool | Centennial | 45 g | 5 min | 8.3 % |
| Whirlpool | Sabro | 25 g | 5 min | 14.8 % |
| Dry Hop | Sabro | 25 g | 3 day(s) | 14.8 % |
| Dry Hop | Cascade | 70 g | 3 day(s) | 5.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale | Dry | 11 g | --- |