

## 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	---