

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