

Browarnicy

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **38**
- SRM **6.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (83.3%)	80 %	5
Grain	Strzegom Monachijski typ II	0.7 kg (14.6%)	79 %	22
Grain	Strzegom Karmel 150	0.1 kg (2.1%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	60 min	10 %
Boil	Citra	20 g	15 min	12 %
Boil	Mosaic	10 g	5 min	10 %
Dry Hop	Mosaic	20 g	4 day(s)	10 %
Dry Hop	Citra	30 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis