

Apa

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **42**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (31.6%)	80 %	5
Grain	Viking Wheat Malt	1 kg (21.1%)	83 %	5
Grain	Viking Pilsner malt	1 kg (21.1%)	82 %	4
Grain	Płatki owsiane	1 kg (21.1%)	85 %	3
Dry Extract	ekstrakt słodowy suchy	0.25 kg (5.3%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	10 g	60 min	16.1 %
Whirlpool	Citra	10 g	45 min	12 %
Whirlpool	Mosaic	40 g	45 min	10.4 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	5 g	Boil	10 min
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