

Apka

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **40**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **0 min** at **76C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (83.3%)	70 %	5
Grain	Pszeniczny	0.3 kg (7.1%)	70 %	4
Grain	Płatki owsiane	0.4 kg (9.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Boil	Citra	10 g	15 min	12 %
Boil	Mosaic	10 g	15 min	10 %
Aroma (end of boil)	Citra	10 g	0 min	12 %
Aroma (end of boil)	Mosaic	10 g	0 min	10 %
Whirlpool	Citra	10 g	0 min	12 %
Whirlpool	Mosaic	10 g	0 min	10 %
Dry Hop	Citra	20 g	5 day(s)	12 %
Dry Hop	Mosaic	20 g	5 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
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us-05	Ale	Dry	11.5 g	---
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