Apa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **49**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **35.4 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

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

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **21.6 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg *(45.5%)*	81 %	5
Grain	Pale Ale Viking	2 kg *(36.4%)*	80 %	5
Grain	Monachijski	0.5 kg *(9.1%)*	80 %	16
Grain	Płatki owsiane	0.5 kg *(9.1%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	13.8 %
Boil	Cascade PL	25 g	5 min	5.5 %
Boil	Chinook	10 g	5 min	13.8 %
Whirlpool	Cascade PL	25 g	1 min	5.5 %
Dry Hop	Cascade PL	50 g	3 day(s)	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5.5 g	Boil	15 min

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Water Agent	Chlorek wapnia	1 g	Boil	60 min
Water Agent	Siarczan wapnia	6 g	Boil	60 min

Notes

- Woda z Kauflandu
  Apr 25, 2019, 1:07 AM

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