

Iekka Apa

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **17**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **21.1 liter(s)**

Steps

- Temp **67 C**, Time **65 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.7 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **65 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (68.2%)	80 %	5
Grain	Żytni	0.7 kg (15.9%)	85 %	8
Grain	cookie	0.2 kg (4.5%)	78 %	100
Grain	Płatki owsiane	0.5 kg (11.4%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	3 g	60 min	15.5 %
Boil	Chinook	20 g	15 min	13 %
Aroma (end of boil)	Simcoe	20 g	0 min	13.2 %
Dry Hop	Simcoe	50 g	3 day(s)	13.2 %

Yeasts

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