

PL APA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **28**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **65 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **65 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (78.1%)	80 %	5
Grain	Pszeniczny	1 kg (15.6%)	85 %	4
Grain	Płatki owsiane	0.4 kg (6.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	35 g	60 min	8.3 %
Boil	Oktawia	60 g	1 min	7.1 %
Dry Hop	Izabella	60 g	5 day(s)	5.1 %

Yeasts

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