

Citrowy włajaż włajaż

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **31**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.55 kg (70.8%)	80 %	5
Grain	Strzegom Karmel 30	0.42 kg (11.7%)	75 %	30
Grain	Pszeniczny	0.42 kg (11.7%)	85 %	4
Adjunct	Płatki owsiane	0.21 kg (5.8%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	8.5 g	60 min	14.2 %
Boil	Citra	8.5 g	30 min	14.2 %
Dry Hop	Citra	10 g	4 day(s)	12 %
Aroma (end of boil)	Amarillo	12.75 g	5 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	9.78 g	Fermentis