

haze apa

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **48**
- SRM **3.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (43.9%)	80 %	5
Grain	Pilznieński	2.2 kg (38.6%)	81 %	4
Grain	Płatki owsiane	0.5 kg (8.8%)	85 %	3
Grain	Płatki pszeniczne	0.5 kg (8.8%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	30 min	12 %
Boil	Simcoe	20 g	10 min	13.2 %
Boil	Pacific Gem	30 g	5 min	15.3 %
Boil	Vic Secret	20 g	5 min	16.3 %
Dry Hop	Citra	50 g	4 day(s)	12 %
Dry Hop	Amarillo	50 g	4 day(s)	9.3 %

Yeasts

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