

Pipa

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **23**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **16.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (65.2%)	80 %	5
Grain	Słód pszeniczny	1 kg (21.7%)	82 %	4
Grain	Płatki pszeniczne	0.3 kg (6.5%)	60 %	3
Grain	Płatki owsiane	0.3 kg (6.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	8 g	60 min	10 %
Boil	Citra	8 g	30 min	12.9 %
Whirlpool	Chinook	8 g	0 min	10 %
Dry Hop	Citra	8 g	3 day(s)	12.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	10 g	Fermentis