

# No tez piwerko

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **25**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Płatki owsiane	0.6 kg (10.7%)	85 %	3
Grain	Pszeniczny	2 kg (35.7%)	85 %	4
Grain	Viking Pale Ale malt	3 kg (53.6%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	5 g	60 min	17 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Whirlpool	Citra	20 g	20 min	12 %
Whirlpool	Motueka	20 g	20 min	7 %
Dry Hop	Citra	20 g	2 day(s)	12 %
Dry Hop	Motueka	20 g	2 day(s)	7 %
Dry Hop	Waimea	20 g	2 day(s)	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wlp644	Ale	Liquid	100 ml	White Labs