

ms

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **78**
- SRM **4.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **36.6 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.66 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.5 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **73C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **36.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (53.3%)	80 %	5
Grain	Pszeniczny	2 kg (26.7%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (6.7%)	60 %	3
Grain	Płatki owsiane	0.5 kg (6.7%)	60 %	3
Grain	płatki jęczmienne	0.5 kg (6.7%)	60 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	60 g	60 min	13 %
Aroma (end of boil)	Mosaic	50 g	5 min	10 %
Aroma (end of boil)	Simcoe	50 g	5 min	13.3 %
Whirlpool	Mosaic	50 g	0 min	10 %
Whirlpool	Simcoe	50 g	0 min	13.3 %
Dry Hop	Mosaic	100 g	3 day(s)	10 %
Dry Hop	Simcoe	100 g	3 day(s)	13.2 %