

## ver

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **18**
- SRM **3.9**

### Batch size

- Expected quantity of finished beer **1700 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1785 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **2183.1 liter(s)**

### Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1266 liter(s)**
- Total mash volume **1688 liter(s)**

### Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **1266 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **1339.1 liter(s)** of **76C** water or to achieve **2183.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	296 kg (70.1%)	80 %	5
Grain	Pilzński	42 kg (10%)	81 %	4
Grain	Płatki owsiane	42 kg (10%)	85 %	3
Grain	Płatki pszeniczne	42 kg (10%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	1100 g	20 min	13 %
Boil	Cascade	1000 g	10 min	6 %
Whirlpool	Cascade	1100 g	20 min	6 %
Whirlpool	Citra	500 g	20 min	12 %
Whirlpool	Mosaic	500 g	20 min	7 %
Dry Hop	Kohatu	3000 g	7 day(s)	7.8 %
Dry Hop	Equinox	4600 g	7 day(s)	13.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - American Ale II	Ale	Liquid	100 ml	Wyeast Labs
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