

- Gravity **11.9 BLG**
- ABV ---
- IBU **39**
- SRM **4.1**
- Style **Bohemian Pilsener**

### 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 **13 liter(s)**
- Total mash volume **17.4 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **13 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	3.9 kg (89.7%)	80.5 %	4
Grain	Bestmalz - Carapils	0.45 kg (10.3%)	75 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Jarrylo	30 g	8 min	13.8 %
Aroma (end of boil)	Waimea	30 g	8 min	15.1 %
Boil	Marynka	5 g	50 min	10.5 %
Dry Hop	Citra	30 g	5 day(s)	12 %
Dry Hop	Amarillo	30 g	5 day(s)	8.8 %
Dry Hop	Mosaic	30 g	5 day(s)	11.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
W-34/70	Lager	Dry	11.5 g	Fermentis Saflager

### Extras

Type	Name	Amount	Use for	Time
Fining	wirflock	3 g	Boil	10 min

### Notes

- Warzone 14/11/2016  
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