

Maniak

- Gravity **15.7 BLG**
- ABV ---
- IBU **54**
- SRM **4.1**
- Style **American IPA**

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 **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **74C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	4.5 kg (78.9%)	81 %	4
Grain	Oats, Flaked	1.2 kg (21.1%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Citra	33 g	10 min	12 %
Aroma (end of boil)	Galaxy	33 g	10 min	15 %
Aroma (end of boil)	Citra	33 g	5 min	12 %
Aroma (end of boil)	Galaxy	33 g	5 min	15 %
Whirlpool	Citra	33 g	30 min	12 %
Whirlpool	Galaxy	33 g	30 min	15 %
Dry Hop	Citra	50 g	4 day(s)	12 %
Dry Hop	Galaxy	50 g	4 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
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WLP645 - Brettanomyces clausenii	Ale	Liquid	500 ml	White Labs
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