

ale

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **21**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **39 liter(s)**
- Trub loss **8 %**
- Size with trub loss **46 liter(s)**
- Boil time **60 min**
- Evaporation rate **11 %/h**
- Boil size **56.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

Steps

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

Mash step by step

- Heat up **25.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **39.5 liter(s)** of **76C** water or to achieve **56.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	7 kg (81.4%)	78 %	6
Grain	Munich Malt	0.5 kg (5.8%)	80 %	18
Grain	Briess - Carapils Malt	0.5 kg (5.8%)	74 %	3
Grain	Caramel/Crystal Malt - 40L	0.6 kg (7%)	74 %	100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	22 g	60 min	12 %
Aroma (end of boil)	Citra	22 g	15 min	12 %
Whirlpool	Citra	100 g	0 min	12 %
Dry Hop	Citra	150 g	4 day(s)	12 %
Dry Hop	Citra	100 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	22 g	Safale

Extras

Type	Name	Amount	Use for	Time
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Fining	protofloc	5 g	Boil	15 min
Other	nutrient blend	6 g	Boil	15 min