

IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **54**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **71C**
- Keep mash **1 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (80%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (10%)	83 %	5
Grain	Viking Munich Malt	0.35 kg (7%)	78 %	18
Grain	Viking caramel malt 100	0.1 kg (2%)	--- %	100
Grain	Caramel 150	0.05 kg (1%)	--- %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Aroma (end of boil)	Centennial	20 g	10 min	10.5 %
Aroma (end of boil)	Simcoe	20 g	5 min	13.2 %
Aroma (end of boil)	Citra	20 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Fermentis