

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **30**
- SRM **8.1**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.8 kg (54.5%)	80 %	5
Grain	Simpsons - Maris Otter	1 kg (30.3%)	81 %	6
Grain	Fawcett - Crystal	0.3 kg (9.1%)	70 %	160
Grain	Biscuit Malt	0.2 kg (6.1%)	79 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	15 g	60 min	12.5 %
Boil	Sabro	7 g	10 min	14 %
Aroma (end of boil)	Amarillo	15 g	1 min	10.3 %
Aroma (end of boil)	Sabro	15 g	1 min	14 %
Dry Hop	Sabro	15 g	2 day(s)	14 %
Dry Hop	Amarillo	19 g	2 day(s)	10.3 %