

Flood

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **20.6**
- Style **Brown Porter**

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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **13.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (76.9%)	80 %	5
Grain	Fawcett - Brown	0.5 kg (11%)	72 %	180
Grain	Special B Malt	0.25 kg (5.5%)	65.2 %	315
Grain	Biscuit Malt	0.1 kg (2.2%)	79 %	45
Grain	Carafa II	0.1 kg (2.2%)	70 %	812
Grain	Fawcett - Pale Chocolate	0.1 kg (2.2%)	71 %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	60 min	6 %
Boil	Cascade	10 g	20 min	6 %
Boil	Willamette	15 g	60 min	5 %
Boil	Willamette	10 g	20 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale