

mild

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **16**
- SRM **17.1**
- Style **Mild**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **10.3 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (85%)	80 %	7
Grain	Caramel/Crystal Malt - 60L	0.23 kg (5.6%)	74 %	118
Grain	Caramel/Crystal Malt - 120L	0.17 kg (4.1%)	72 %	236
Grain	Fawcett - Pale Chocolate	0.12 kg (2.9%)	71 %	600
Grain	Black (Patent) Malt	0.1 kg (2.4%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	20 g	60 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	safale