

American bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **48**
- SRM **7.7**
- Style **Special/Best/Premium Bitter**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.8 kg (95%)	80 %	7
Grain	Caramel/Crystal Malt - 120L	0.2 kg (5%)	72 %	236

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	15 g	60 min	17 %
Aroma (end of boil)	Cascade	20 g	10 min	6 %
Aroma (end of boil)	Citra	20 g	5 min	12 %
Aroma (end of boil)	Summit	25 g	3 min	17 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Ale Y514	Ale	Dry	12.5 g	Mauribrew