

American Bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **24**
- SRM **7.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **30.4 liter(s)**
- Total mash volume **38.4 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **30.4 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **28.2 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	7.6 kg (95%)	80 %	7
Grain	Crystal II 200	0.4 kg (5%)	71 %	200

Hops

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

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis