

Golden ALE #1

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **7.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **0 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.4 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **8.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt, Maris Otter	2 kg (70.2%)	82.5 %	14
Grain	Viking Vienna Malt	0.65 kg (22.8%)	79.5 %	21
Grain	Viking Wheat Malt	0.2 kg (7%)	84 %	15

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	30 min	15 %
Boil	Citra	10 g	15 min	12 %
Boil	Citra	10 g	5 min	12 %
Boil	Amarillo	15 g	0 min	9.2 %
Whirlpool	Citra	10 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	DCL/Fermentis