

Golden Pale Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **34**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

Steps

- Temp **66 C**, Time **30 min**
- Temp **67.5 C**, Time **30 min**

Mash step by step

- Heat up **33 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **67.5C**
- Sparge using **41.3 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Vienna Malt	3 kg (27.3%)	79 %	7
Grain	Viking Pale Ale malt	8 kg (72.7%)	82 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Hallertau Blanc	150 g	15 min	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Liquid	500 ml	Fermentis