

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **74 C**, Time **30 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **74C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	20 g	60 min	10 %
Boil	El Dorado	30 g	60 min	15 %
Boil	Citra	20 g	10 min	12 %
Boil	Citra	30 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---