

apa

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (90.9%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (9.1%)	78 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	20 min	8.4 %
Boil	Simcoe	20 g	20 min	11.8 %
Boil	Chinook	30 g	7 min	8.4 %
Boil	Simcoe	30 g	7 min	11.8 %
Dry Hop	Chinook	50 g	2 day(s)	11.8 %

Yeasts

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