

Apa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **36**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **67 C**, Time **70 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **70 min** at **67C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

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

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	5 min	5.2 %
Boil	Magnat	22 g	60 min	12 %