

Apa w12

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **32**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **2 %**
- Size with trub loss **64.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **73.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **52.5 liter(s)**
- Total mash volume **67.5 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **52.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **36.4 liter(s)** of **76C** water or to achieve **73.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (33.3%)	82 %	4
Grain	Viking Pale Ale malt	10 kg (66.7%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Mosaic	50 g	15 min	10 %
Aroma (end of boil)	Citra	50 g	20 min	12 %
Boil	Centennial	50 g	30 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	200 ml	200